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Model State Information System Training Program. Volume III. Slide/Cassette Workbook for Data Entry

Cincinnati Univ, Ohio Southwestern Ohio Regional Computer Ctr

Prepared for

Environmental Protection Agency, Washington, D C

Jun 77

PB 281 226

Model State Information System
Training Program

Volume III

Slide/Cassette
Workbook

For

DATA ENTRY

Prepared for the

U.S. Environmental Protection Agency
Office of Water Supply
Washington, D.C. 20460
under GSA Contract No. GS-05S-10458
Task Assignment OWS-77-01

by the
SouthWestern Ohio Regional Computer Center
Cincinnati, Ohio
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This slide/cassette course on Data Entry for the Model State Information System (MSIS) is one of four prepared by the SouthWestern Ohio Regional Computer Center, for the Office of Drinking Water, U. S. Environmental Protection Agency, Washington, D.C.

The Data Entry slide/cassette course has a corresponding workbook, designed to aid persons learning about MSIS. This workbook can be used in conjunction with the MSIS slide/cassette Training Program or it can be used advantageously by itself as a learning or reference tool.

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Ellen G. Miller
Project Manager, OWS-77-01

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INTRODUCTION

This slide/cassette course on the Model State Information System (MSIS) is one of four prepared by the SouthWestern Ohio Regional Computer Center, Cincinnati, Ohio, for the Office of Water Supply, U.S. Environmental Protection Agency, Washington, D.C. The four slide/cassette courses are:

Volume I - MSIS Overview
Volume II - MSIS Subsystems
Volume III - Data Entry
Volume IV - Selection Process

Each slide/cassette course has a corresponding workbook, designed to aid persons learning about MSIS. This workbook can be used in conjunction with the MSIS Slide/Cassette Training Program or it can be used advantageously by itself as a learning or reference tool. Conscientious application of the material contained herein will result in a deeper knowledge of the entire MSIS program.

Before beginning the slide/cassette presentation, please turn to the Instructions for Users and read the directions to facilitate optimum utilization of the slide/cassette teaching device.

NOTES

INSTRUCTIONS TO USER

The design of this Model State Information System (MSIS) Slide/ Cassette Training Program assumes that each viewer has in his possession and will use the workbook which corresponds to the volume indicated by the slide/cassette package. This workbook is intended to serve as a learning aide and, later, as a reference tool. These instruciton should be read in order to derive maximum benefit from this workbook.

The Individual Unit Material is a storybook version of all material contained on the slide/cassette presentation. Information contained on the cassette tape is duplicated verbatim in the textual portion of the individual unit material. The corresponding slide is duplicated to allow a visual facsimile of the slide presentation. Therefore, as a reference tool, the entire slide/ cassette presentation can be reviewed in great detail.

The Pre-Test is to be completed prior to using the slide/cassette devices. It is designed to measure the viewer's individual knowledge of MSIS before exposure to the information contained in this presentation. Upon completion of the Pre-Test, the viewer is to turn on the slide projector and accompanying cassette tape player and proceed with the training course.

Bring up the first slide on the screen; then start the recorder.

Instructions concerning the Exercises are contained in both the slide/cassette presentation and the corresponding workbook. The phrase "STOP TAPE...COMPLETE REVIEW/EXERCISES" indicates that it is time to measure the viewer's comprehension of material previously presented. The slide immediately following will refer the viewer to the specific exercise corresponding to the material covered. The exercises are placed in the workbook in their order of occurrance, but the viewer is responsible for matching the number appearing on the screen with that appearing in the upper right-hand corner of the exercise.

The Exercises are designed to be self-evaluating and should be used accordingly. The viewer should turn the slide projector and cassette tape player off, complete the appropriate exercise(s), compare his/her answers to the corresponding answer sheet provided in this workbook, and judge accordingly whether the information was successfully transferred or if it should be reviewed for a more complete understanding.

The Glossary will serve as a quick reference for words unfamiliar to the viewer. Words which have particular reference to the Model State Information System and whose meaning in this context may vary from the common definition are listed in the Glossary. Because the Glossary provides a concise list of terms pertinent to the data processing field and, more specifically, MSIS, it is advisable for the viewer to read through the words and their definitions at some point during the training period. The amount of exposure necessary for a complete understanding of terms will depend upon the viewer's individual previous familiarity with data processing and MSIS terminology.

The Acronym portion of this workbook lists all abbreviations formed by combining initial letters which occur in this course's content. Because the Model State Information System is itself commonly referred to as an acronym (ie., MSIS) it is imperative that the viewer of this slide/cassette program become familiar with and study the abbreviations listed here. They are all explained in detail during the training course, but only by repeated exposure and examination will the trainee recognize the acronyms commonly used in connection with the MSIS.

Extracts from MSIS Documents consist of selected system documentation, relevant Environmental Protection Agency publications, reports generated by system runs, and any other information deemed necessary to aid further understanding and to provide background information on the contents contained in this slide/cassette course presentation.

Upon successful completion of material covered on a slide/cassette tray, the viewer will be informed that the current portion is over by a slide which directs him/her to "CHANGE SLIDE TRAY AND AUDIO CASSETTE". It will be followed by a blank slide. At this time, the viewer will replace the slide tray and corresponding audio cassette tape with the next sequentially designated slide/cassette presentation and continue the training course. The slide/cassette presentation is not complete until the viewer encounters an "END OF VOLUME" slide. At this point, the viewer should turn off the slide projector and audio device, complete the Post-Test referenced during the later portion of the presentation, and compare the Post-Test to the Pre-Test to evaluate the amount of specific knowledge which was obtained during this training presentation.

It is the intention of this MSIS slide/cassette training program not only to impart knowledge of the Model State Information System, but to provide the viewer with an opportunity to practice the knowledge gained, and to refer back to this workbook when using MSIS in daily operations.

Model State Information System

MSIS

Slide-Cassette Training Program

Volume III

Units I and II

INDIVIDUAL UNIT MATERIAL

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NOTES

Volume III
Data Entry

INDIVIDUAL UNIT MATERIAL

III.1

Model State
Information System
(MSIS)
Slide/Cassette
Training Program

This is the third of four volumes comprising the Model State Information System Slide-Cassette Training Program.

III.2

MSIS

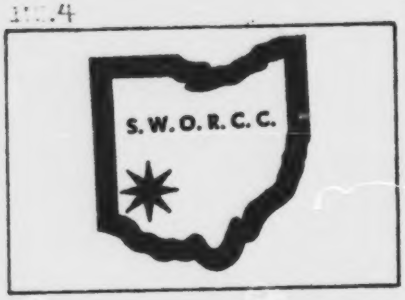
The Model State Information System, commonly referred to as MSIS, is a computer system designed to help the states implement the Safe Drinking Water Act.

III.3

SouthWestern Ohio
Regional Computer Center
Cincinnati, Ohio

Both the computer system and this accompanying slide-cassette training program were developed by the SouthWestern Ohio Regional Computer Center,

III.4



or SWORCC, under contract with the Office of Water Supply, Washington, D.C.

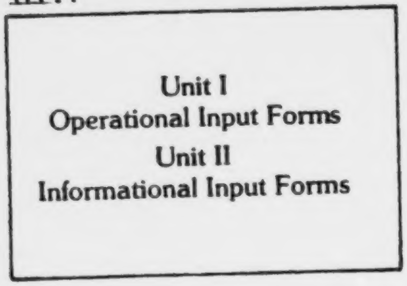
III.5

Hello, I'm the conductor of the MSIS train and will be guiding you through this training program.

III.6

It's my responsibility to keep things "on track" and see that you have a pleasant journey and a good learning experience. First, let's look at the contents of this volume.

III.7

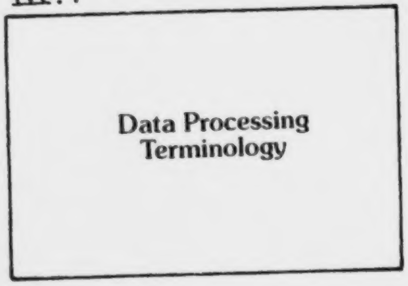

Unit I
Operational Input Forms
Unit II
Informational Input Forms

This Volume will be presented in two units, both concerned with the input and retrieval of information.

III.8

Before taking up the formal course material I think it would be helpful to define some data processing terms. MSIS is a computer system. Sound understanding of its functions and capabilities is dependent on your familiarity with commonly used data processing terms.

III.9


Data Processing
Terminology

If you are familiar with data processing terms, or have covered them in Volumes I or II of this program, you may wish to skip these definitions.

III.10

Computer Program

A computer program is a logical set of instructions for the computer in machine-readable format. Computer programs are often decks of punched cards.

III.11

Computer System

A computer system is a group of computer programs developed to accomplish specified functions. MSIS is such a computer system.

III.12

Subsystem

A computer system is made up of subsystems; MSIS has nine such subsystems.

III.13

Hardware

Hardware is any physical device of the computer. Examples are: printer, card reader, and card puncher.

III.14

Software

The computer programs are referred to as software.

III.15

Record

A record is a logical group of information. An example is the information contained in your social security record.

III.16

File

A file is a group of records, usually in a specific sequence, and often on magnetic tape. An example would be the Cincinnati social security file.

III.17

Data Element

A data element is an identifiable item within a record. Your social security number is such a data element.

III.18

Magnetic Tape

Magnetic tapes are used to store limited amounts of machine-readable information sequentially.

It resembles home tape recorder tape, but it is wider.

III.19

Magnetic Disc

Magnetic discs are used to store large amounts of machine-readable information and are directly accessible by the computer.

They look like a stack of LP records.

III.20

Input

Input is any information to be entered on a computer file or table, or the actual process of entering such information. Key-punched cards are often used to enter input.

III.21

Batch System

A batch system accumulates groups of inputs, such as key-punched cards, before submitting those inputs to the computer. The counterpart of the batch system is the on-line or real-time system where inputs are submitted without delay. MSIS is a batch system.

III.22

Output

Output is information already processed by the computer. The federal reports produced by MSIS are examples of output.

III.23

Report

A report is output by the computer in user-readable format. Examples are printed listings.

III.24

Turn-Around Document

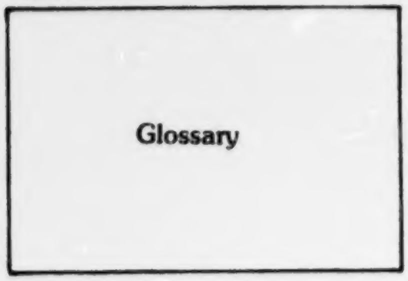
A turn-around document is a report printed by the computer and later used as an input to the computer. MSIS provides turn-around documents.

III.25

Internal

The word "internal" refers to processing done by computer programs within the computer.

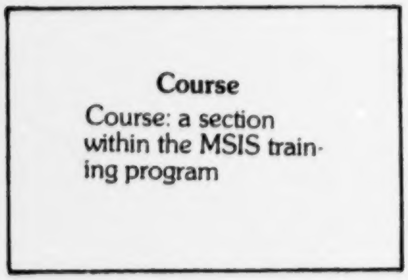
III.26


Glossary

Your workbook contains a glossary. The data processing terms just discussed, as well as other generally unfamiliar words and abbreviations, are included there for your convenience.

In addition, and especially relevant for your understanding of the formal material to be presented, are the terms "course" and "unit".

III.27


Course

Course: a section within the MSIS training program

Volume III of the MSIS Slide-Cassette Training Program, which you are now viewing, meets this definition of a course.

III.28

Unit

Unit: a section within the course

This particular course, Data Entry, contains two units. However, the number of units may vary from course to course.

III.24

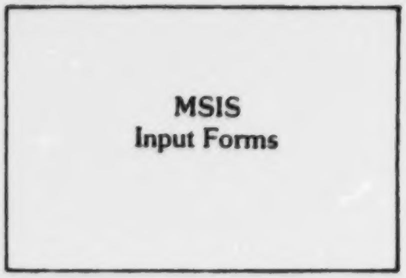
Did you complete the pre-test? If so, that takes care of the preliminaries. If not, it should be completed at this time.

III.30

Volume III
Data Entry

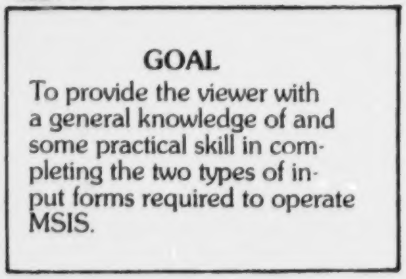
This is the third volume of the four-volume set which comprises the MSIS Slide-Cassette Training Program. As the title implies, this volume is concerned with preparing data for input to MSIS.

III.31


MSIS
Input Forms

An input form allows the user to enter desired information onto the computer tables and files, and to specify needed output reports. MSIS has approximately 75 separate input forms. These forms, however, are not totally distinct. For forms with multiple parts, each page is assigned a different form number. In addition, identical forms are assigned different numbers when used by different subsystems.

III.32

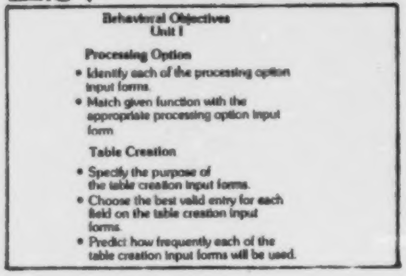

GOAL
To provide the viewer with a general knowledge of and some practical skill in completing the two types of input forms required to operate MSIS.

Our goal for Volume III is shown here. Notice that the goal includes the practical skill of form completion as well as a general knowledge of the form itself.

III.33

Since the goals and objectives will provide the focus for this presentation, a good definition of each would be helpful. As used here, a goal is the end result sought and is stated in broad, general terms. An objective is much more specific, and when stated in behavioral terms can be easily measured to determine attainment. The attainment of all the behavioral objectives will assure that the goal is reached.

III.34



Behavioral Objectives
Unit I

Processing Option

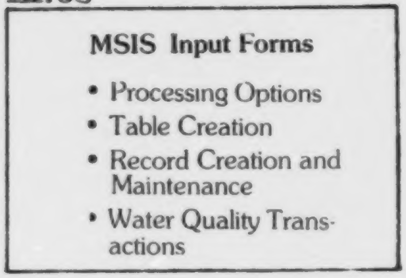
- Identify each of the processing option input forms.
- Match given function with the appropriate processing option input form

Table Creation

- Specify the purpose of the table creation input forms.
- Choose the best valid entry for each field on the table creation input forms.
- Predict how frequently each of the table creation input forms will be used.

These are the behavioral objectives for Unit 1. Both the material presented and the review/exercises will focus on these areas. Take a few moments to study each objective.

III.35



MSIS Input Forms

- Processing Options
- Table Creation
- Record Creation and Maintenance
- Water Quality Transactions

Input forms may be divided into the four functional categories shown here.

III.36

Operational Input Forms

- Processing Options Input Forms
- Table Creation Input Forms

These functional categories are then grouped into the operational and informational categories shown here to facilitate the presentation of the material.

III.37

Informational Input Forms

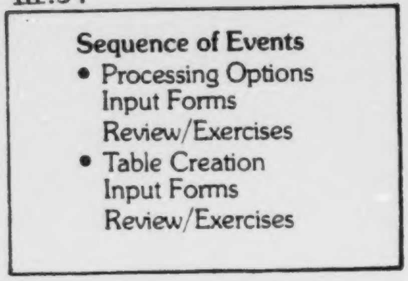
- Record Creation and Maintenance
- Water Quality Transactions

III.38

Unit I
Operational Input Forms

We will begin our study of data entry by making a close examination of those forms found in the Operational Input Forms category. First, however, let's look at the sequence in which the material for this unit will be presented.

III.39



Sequence of Events

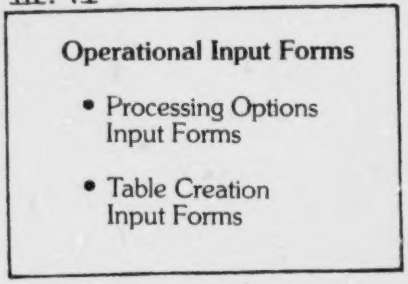
- Processing Options
  Input Forms
  Review/Exercises
- Table Creation
  Input Forms
  Review/Exercises

This is the sequence of material for Unit 1. Note the provision for review/exercises. These exercises will allow you to estimate your own learning by comparing your completed work against the answer sheet provided.

III.40

Your workbook contains facsimilies of these slides and the script for the accompanying audio. Additional reference material is also included for further review as you feel appropriate.

III.41



Operational Input Forms

- Processing Options
  Input Forms
- Table Creation
  Input Forms

The Processing Options and Table Creation functional categories of input forms will be covered in this unit.

III.42

Operational Input Forms

- Processing Options Input Forms
- Table Creation Input Forms

First, lets consider the Processing Option input forms. There are five types of input forms contained in this category.

III.43

Processing Option Input Forms

☐ PROC
☐ SORT
☐ SEL1 (Selection Criteria 1)
☐ SEL2 (Selection Criteria 2)

There are about 40 Processing Options Input Forms. Taken together, they allow the user considerable flexibility in determining how MSIS will process information.

We will look at an example of each of these four types starting with the PROC Form. A fifth type, called "Restart", will not be covered separately. The Restart form provides the computer operations personnel with a means for restarting a program when it stops in the middle of a run.

III.44

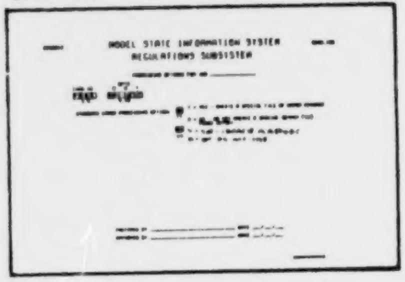
Processing Option Input Forms

- PROC

The PROC Form is used to initiate a program or series of programs. Consequently, it is used quite frequently. It provides the user with such options as whether or not to create a file or report. If a report is to be created, it may specify the date, type and period of the report.

Each of the nine MSIS subsystems has at least one PROC Form, with a total of about 23 for the entire system.

III.45



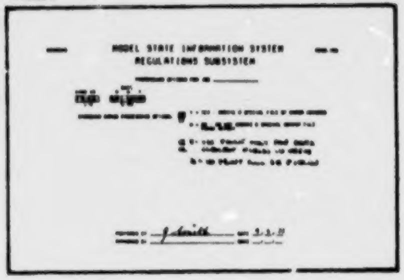
MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

This REGS.100 input form will be studied as a representative example of the 23 PROC Forms.

Note that the second line in the heading indicates that this form will be input to the Regulations Subsystem.

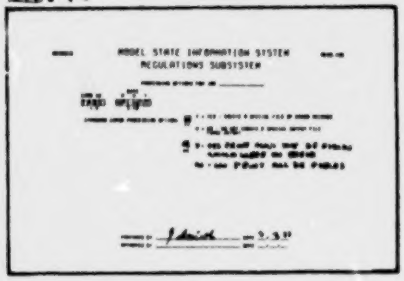
Note also that only one keypunch card is required since only twelve positions are shown. Keypunch cards contain 80 columns or positions.

III.46


MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The form derives its name from the first field, which spells out P-R-O-C or PROC. Notice the six-position field for the date. Here, as in all cases, double digits are used for the month, day and year. When the numeric value of any portion of the date field can be represented by a single digit, the entry will be "right-justified". In this example, the entry for September 10, 1977, is shown as 091077.

III.47


MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

As previously stated, the PROC Form gives the user options. Here the option is whether or not to create a file. The "N" entry tells the computer not to create the file.

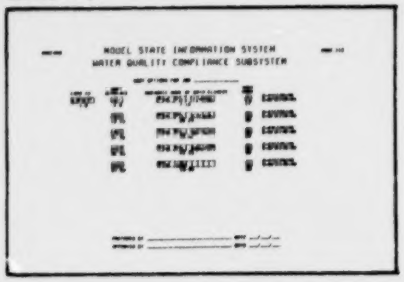
Reproduced from
best available copy.

III.48

Processing Option Input Forms
- PROC
- SORT

The SORT Input Form contains instructions to the computer for use in sorting output information. These are standard computer forms which indicate: (1) the data elements to be used in sorting; (2) the sorting sequence; and (3) either an ascending or descending sorting order. They are frequently used since most output reports require at least some elementary ordering of information. Although there are six separate forms, their only distinguishing characteristic is the subsystem designations.

III.49

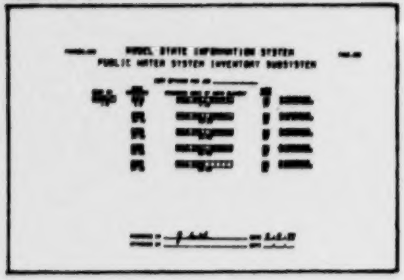


MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

This is the SORT processing option for the WAQC subsystem. It is used frequently for sorting the many reports offered by that subsystem. Notice that the keypunch card columns run from one through 69, well within the capacity of a single card with its 80 columns.

The SORT forms also derive their name from the pre-printed card ID, position 1-4, which spells out SORT.

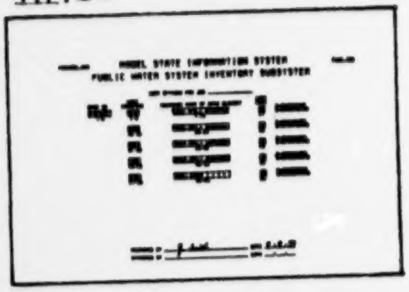
III.50



MODEL STATE INFORMATION SYSTEM
PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

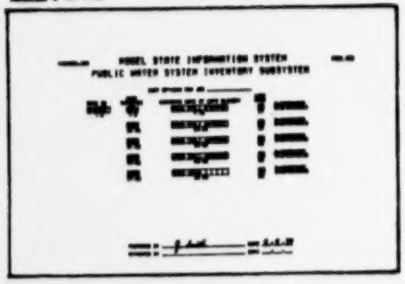
This completed SORT Form for PWSI will be examined in detail. Following the card ID we see that the second field specifies the sort sequence. This entry determines the sequence in which the sorting will be accomplished and thus the location of the information on the printed report. That is, 01 will be sorted first; 02 will be a sort of identical 01 information; 03 will be a sort of identical 02 information, and so forth. SORT entries must be ascending, consecutive numbers. They could not be pre-printed since two or more forms may be input for a total of ten sorting sequences.

III.51



The third field in this line is the mnemonic name of the data element. This entry allows the user to specify the data element to be used for the sort sequence. In this example, the sort sequence "01" is PWS "type". The two PWS types are community, non-community.

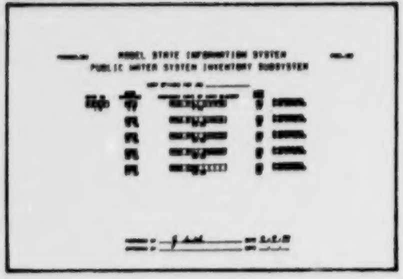
III.52



The last field, position 17, specifies the sort mode. "A" is used for ascending and "D" for descending.

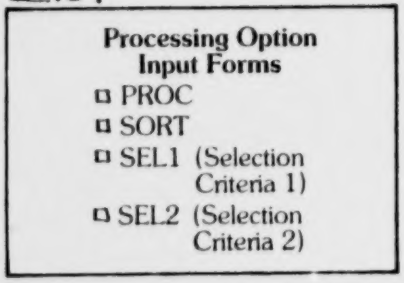
An ascending sort would start from A and proceed through the alphabet, or numerically would start with the number 0 and proceed up. An ascending sequence has been specified here, so all community PWSs will be listed first, followed by non-community PWSs.

III.53



Here we have the entire SORT Form completed and ready for keypunch. Notice that the 02 sort sequence is PWS plant cycle in ascending sequence. Therefore, all community PWSs will be sorted by their cycle and all non-community PWSs by their cycle.

III.54

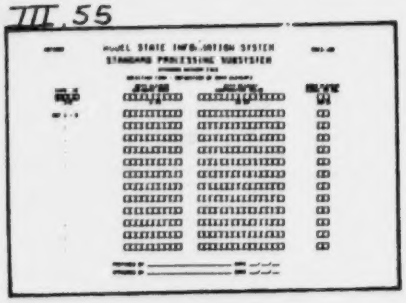


Processing Option Input Forms

- ☐ PROC
- ☐ SORT
- ☐ SEL1 (Selection Criteria 1)
- ☐ SEL2 (Selection Criteria 2)

The SEL 1 and SEL 2 forms are always used in pairs and will be considered together. As the name implies, they are used to specify the particular records to be selected from the input files to make up the output reports or files.

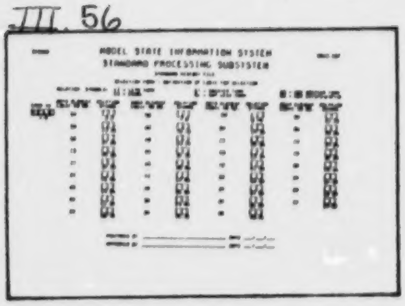
III.55



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

This is SEL 1 prior to completion. Again, position 1-4 gives the form its name. We see that each line of data processing information represents one keypunch card, and that the CARD ID is entered on each card in position 1-4 by the keypunch operator.

III. 56



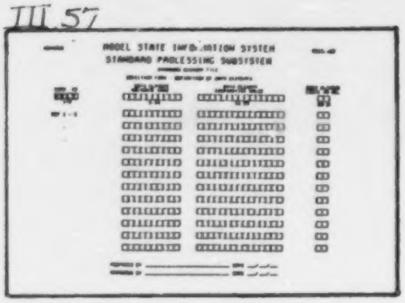
MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

This is SEL 2. Its CARD ID is also pre-printed in position 1-4.

Notice that despite the form's size, all information will be entered on one keypunch card since the positions required here are one through 74.

Finally, look at the fifth line in the form heading, which begins with the words, "Relation Symbols". There are six possible choices beginning with "LT" for "less than". We will see how they are used shortly. Now let's look at a completed SEL 1.

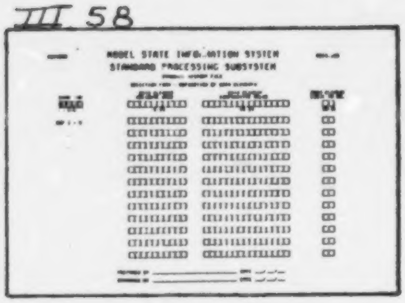
III 57



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The second field in this line is at position 5-14 and is called the "data element mnemonic name". Recall that names are always left-justified. This tells the computer exactly what data element to seek. The entry shown here is for a region within the state.

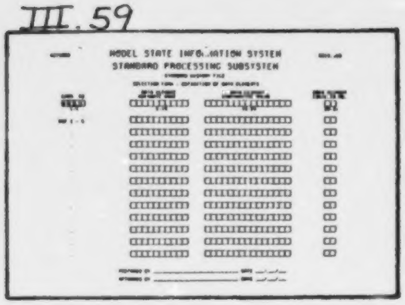
III 58



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

This field assigns a value to the data element listed in the last field. This is the information that will later be used in conjunction with SEL 2 to make the final record selection. In this example, it is 02, meaning Region No. 02.

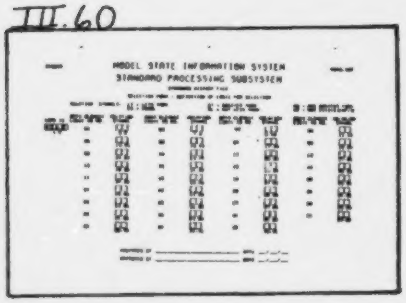
III.59



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The last field here is the "Data Element Logic ID Number". This number corresponds exactly to the same pre-printed entry on SEL 2. Again, entries must be ascending, consecutive, numerical as on the SORT form. Entries are not pre-printed since more than one form may be used. This field has an 01 entered. Now let's look at SEL 2.

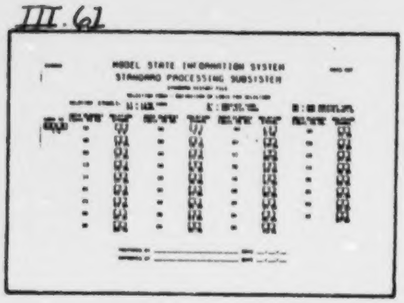
III.60



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

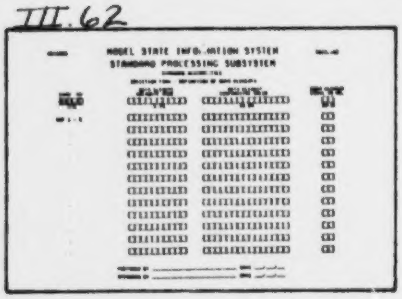
Look at the second field headed "Data Element Logic ID Number" which has a pre-printed entry of 01. This corresponds to the data element identified on SEL 1 with our "01" entry.

III.61


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The third field shown here is the "Relation Symbol" and completes the information needed by the computer for the final record selection. In this instance an EQ for "equal" has been entered. This means that the user wants to select all PWS records within Region 02. Now let's review the whole process.

III.62


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

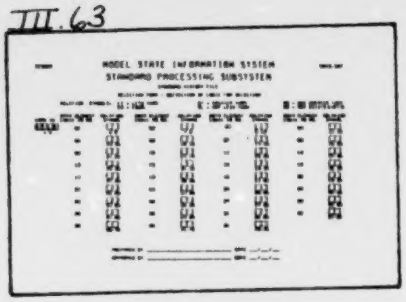
Field one tells us this is the SEL1 Input Form.

Field two contains the proper data element mnemonic name for "region".

Field three indicates that the value to be compared is "two".

Finally, field four identifies the logic ID number on SEL2 corresponding to the relation symbol desired.

III.63



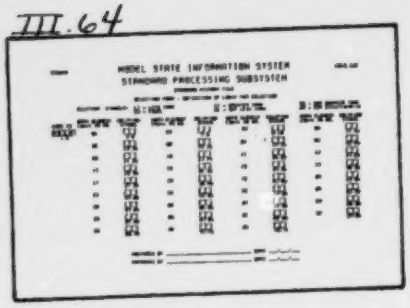
MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Field one identifies the input form as SEL2; the pre-printed "01" in field two tells us we are referring to the data element we identified on SEL1 as number 1; and the entry in field three tells the computer to search all records for that data element and select only those which are equal. The end result is that the computer selects all records within region two for the report.

More complex selections may be made by defining more data elements on SEL1 and relation symbols on SEL2.

Recall that a separate keypunch card is used for each data element line that is filled out.

III.64

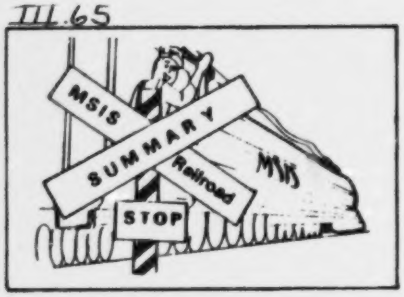


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Again, for each possible line entry on SEL1, the corresponding Data Element Logic ID Number is pre-printed on SEL2. Then, when the corresponding Relation Symbol is entered, the data entry for that record selection is complete.

As with all MSIS Input Forms, the Volume titled "Data Entry Instructions" contains helpful information for form completion. The User's Manual should be referred to for more complex examples.

III.65



That concludes our consideration of Processing Options Forms. Let's review what we have covered so far.

III.66

Operational Input Forms

- Processing Options Input Forms
- Table Creation Input Forms

We saw that there were two general types of Operational Input Forms: Processing Options and Table Creation.

III.67

Processing Option Input Forms

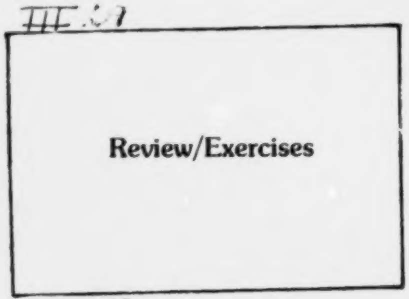
PROC
SORT
SEL1 (Selection Criteria 1)
SEL2 (Selection Criteria 2)

Next, we looked in detail at the Processing Options Forms, learning that the PROC Form may enable us to tell the computer which date we want on the report and whether or not to establish files, tables, reports, etc. The SORT Form instructs the computer as to how the information should be ordered on the Output Reports. SEL1 and SEL2 jointly tell the computer what records to select for the Output Reports.

III.68

It's time you had an opportunity to do some work on your own. I am sure that a close study of the input forms and reference material provided in your workbook will be needed to completely clear up all questions you have regarding Processing Options Input Forms. You are urged to work carefully and talk with your instructor or neighbor to clear up points of difficulty.

III.69

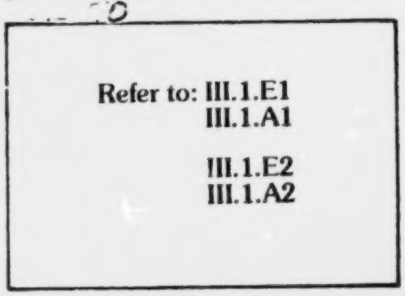


Review/Exercises

Turn to the review/exercises shown in your workbook.

STOP TAPE . . . COMPLETE REVIEW/EXERCISES

III.70



Refer to: III.1.E1
III.1.A1

III.1.E2
III.1.A2

Our next topic will be Table Creation Input Forms.

CHANGE SLIDE TRAY AND AUDIO CASSETTE

III.71

Operational Input Forms

- Processing Options Input Forms
- Table Creation Input Forms

As previously mentioned, the Table Creation Input Forms, together with the Processing Options Input Forms, make up what we are calling Operational Input Forms.

III.72

- **Table Creation Input Forms**
  Error Message Table (EMT)
  Data Element Table (DET)
  Code Value Table (CVT)
  Laboratory Table (LBT)
  Regulations File (RGF)

There are five types of Table Creation Input Forms.

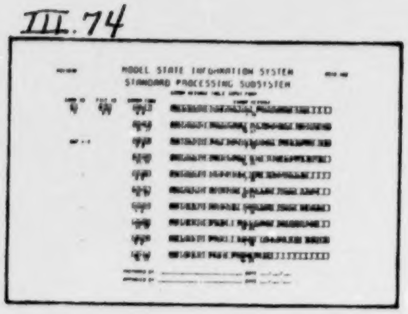
We will start our discussion with the Error Message Table Input Form and then move right through the list.

III. 73

- **Table Creation Input Forms**
  Error Message Table (EMT)

The Error Message Input Form is used to enter the error code and its accompanying message into the Error Message Table. In as much as this table is delivered complete with the computer system, this input form would be used only infrequently to add new codes and messages needed as a result of program changes.

III.74

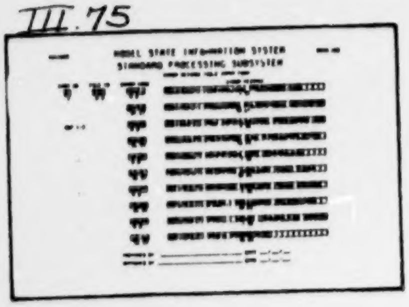


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Note that in line one, the first two fields, CARD ID and FILE ID, are pre-printed.

We also note that two lines of data entry information occupy positions 1-65 and then repeat with the next two lines. The keypunch operator would therefore enter the first 65 positions as one record and then start a new record "duping" the first three positions as instructed by the form.

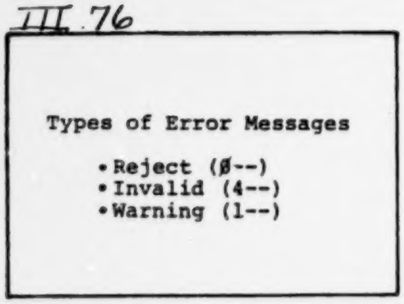
III.75



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

A completed form is shown here. Look at field three, labeled "error code". All entries in this column contain three-digit numbers and all begin with a zero. Now look at field four, labeled "error message". All messages begin with the word "Reject".

III.76



Types of Error Messages

- **Reject (0--)**
- **Invalid (4--)**
- **Warning (1--)**

The MSIS has three types of error codes. Each is identified by the first word in the message.

III.77

Types of Error Messages

- Reject (0--)

If the error message is preceded by the word "Reject", it indicates that the computer rejected the entire record of information that was being input. Error codes for reject messages are three position numbers and begin with a "zero".

III.78

Types of Error Messages

- Reject (0--)
- Invalid (4--)

If the word "Invalid" appears, it indicates that the data element involved with the error was not accepted but that all other input on the record was accepted. Error codes for invalid messages are three position numbers and begin with a 4, 5, 6, 7, 8 or 9. However, the only 9-level entry is 900.

III.79

Types of Error Messages

- Reject (0--)
- Invalid (4--)
- Warning (1--)

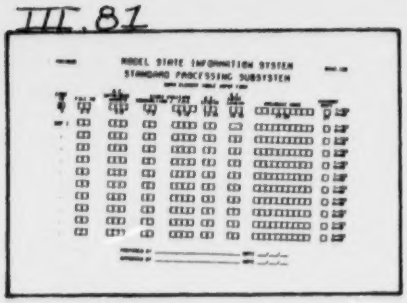
If the word "Warning" precedes the message it means the computer has accepted the data but does not feel the data is within acceptable bounds. Warning error messages alert the user of possibly invalid input. Error codes for warning messages begin with a "one".

III.80

- **Table Creation Input Forms**
  Error Message Table (EMT)
  Data Element Table (DET)

The DET Input Form simply enters a data element identification number (generally referred to as ID) and its corresponding field description in the DET. This table also has been prepared; consequently, the form will be used infrequently to establish identifying codes for new data elements.

III.81



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

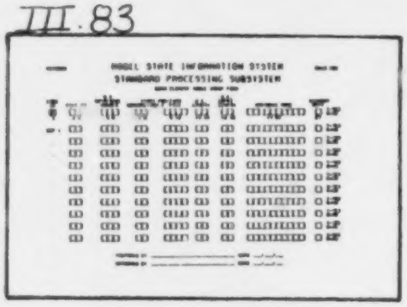
This form allows for one data element entry per card as indicated by the "dupe" instructions to the keypunch operator in field 1 of lines 2 through 11.

III.82

!
FEDR?
1826*
EMAC
?
? VAEX
SRVY
!!
WAOC

Feeling confused? Let's examine a completed example carefully.

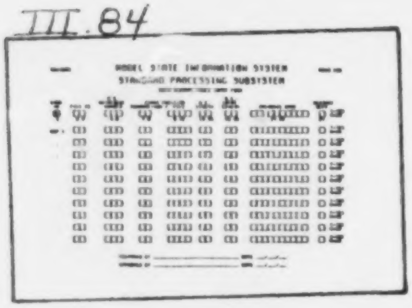
III.83



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Field 2, the file ID, identifies the file which uses the data element code value during processing. The file ID may be obtained from the Data Entry Instructions. Since a file ID is assigned, we know that a separate entry must be made to enter the information on each file using the information. Note that here the information is not pre-printed since more than one file in the MSIS uses the information.

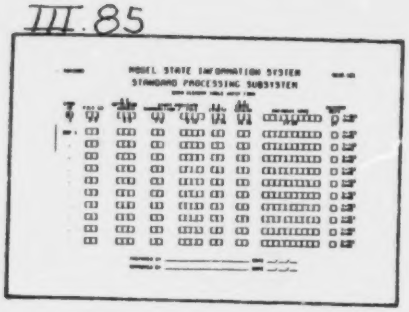
III.84



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

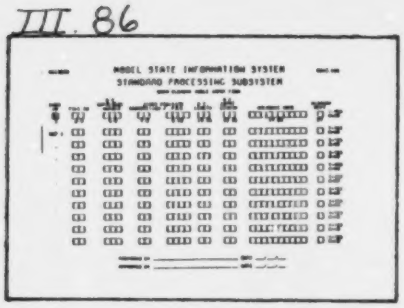
The third field, or Data Element Catalog Number, represents a unique, three-digit number which has been added to the Data Element Dictionary.

III.85


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

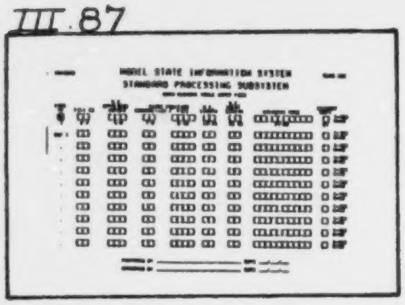
The four fields shown describe for the computer the new data element as it is entered on the keypunch card and as it appears on the file specified.

III. 86


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The two field positions shown here under the "Start Position" heading are used to identify, respectively, the starting position of the data element on the keypunch card and on the computer file.

III.87

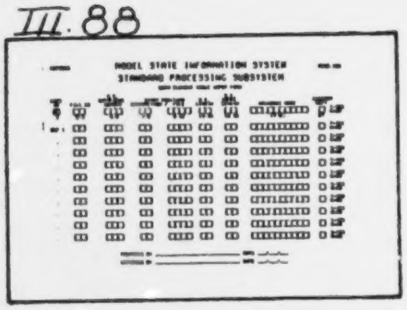


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The Data Element Length, positions 13 and 14, refers to the actual space occupied on the computer file. This information may be obtained from the appropriate record layout for the file in question.

The second field here, positions 15 and 16, represents the number of keypunch card positions the data element occupies when it is entered into MSIS.

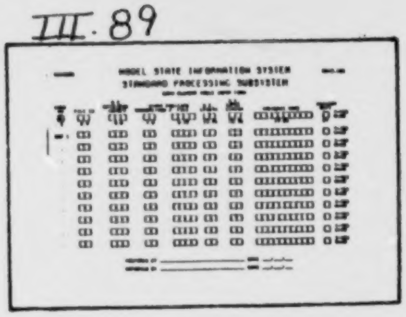
III.88



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Finally, we come to the Data Element Mnemonic Name. This name is created by the state and has been added to the Data Element Dictionary.

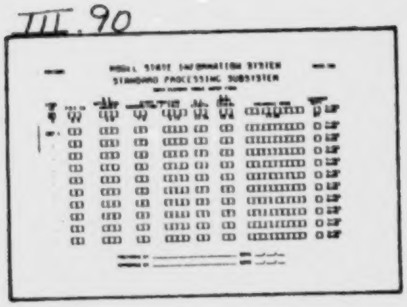
III.89


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The last field gives the user an option as to whether or not changes to the data elements will be recorded on the appropriate history file. The entry applies to data on the following files:

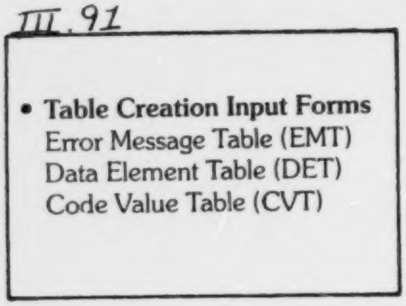
- PWF
- OMF
- EAF
- VEF
- VIF

III.90


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Data elements for more than one file, as well as more than one data element for the same file, can be changed with this one form since the file ID is not pre-printed.

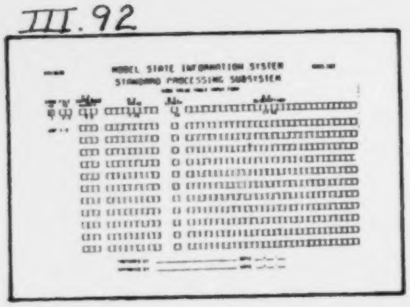
III.91



- **Table Creation Input Forms**
  Error Message Table (EMT)
  Data Element Table (DET)
  Code Value Table (CVT)

The Code Value Table Input Form is used to enter the acceptable value or values of a data element and their corresponding descriptions in the Code Value Table. While some codes were supplied with MSIS, others must be created and entered by the state.

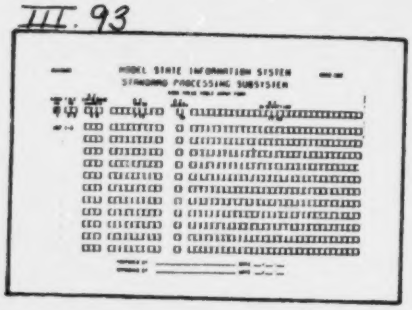
III.92



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Only the card ID is pre-printed. One keypunch card is used for each line.

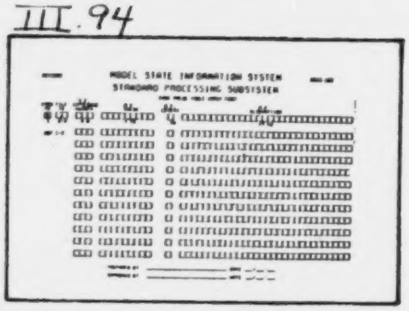
III. 93



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

The second field is the file ID, again obtained from the Data Element Dictionary. The particular file requiring the data element is entered here. If more than one file is concerned, a separate input form must be used for each, since keypunch instructions call for entering the same file ID for all other line entries.

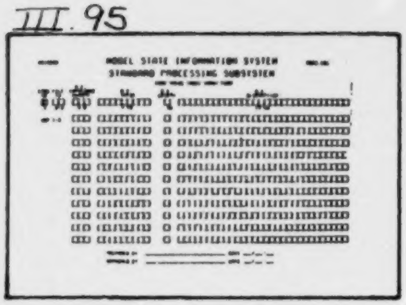
III. 94



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Field 3 is the catalog number. Again, it is obtained from the Data Element Dictionary.

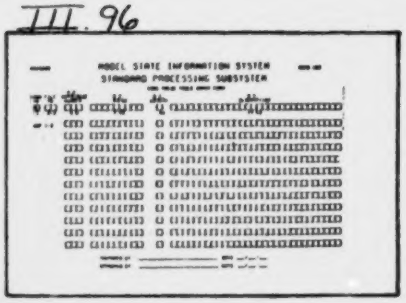
III. 95



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Field 4, position 7-15, contains one acceptable value for the data element. This field must be filled out for every single acceptable value for this data element. For example, a state using a county code must input each county code using the Code Value Table Input Forms. As you can imagine, this form is used hundreds of times when the states set up their own code values. Values must be left-justified.

III. 96

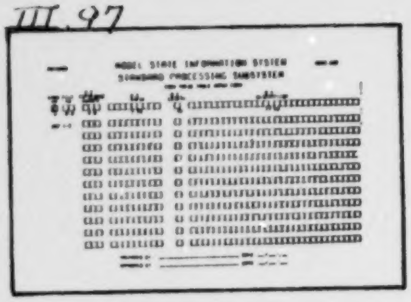


MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

Field 5 refers to the entry in field 3 and represents the number of positions which the data element occupies.

con't

III.97



MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

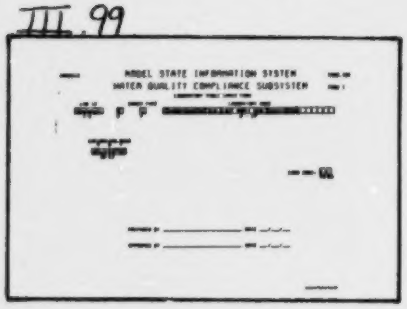
This last field explains the valid code for the data element.

III. 98

- **Table Creation Input Forms**
  Error Message Table (EMT)
  Data Element Table (DET)
  Code Value Table (CVT)
  Laboratory Table (LBT)

The Laboratory Table Input Form allows the state to enter those laboratories it has certified together with the expiration date of such certification, the contaminants the laboratory is certified to analyze, and the analysis methods it may use.

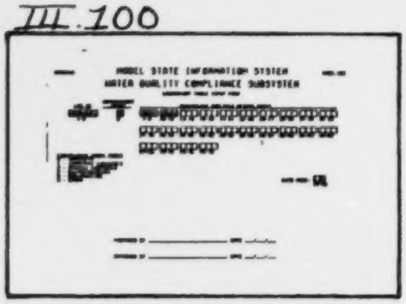
III.99



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

This form represents one punched card. It has one pre-printed field, card code L1 in the last two keypunch positions, 79 and 80. The laboratory Table Input Form has two pages.

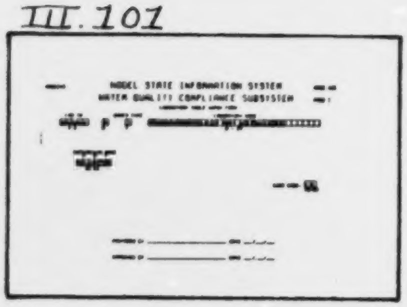
III.100



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

This is page 2. Again, we see a pre-printed card code, L2, here in positions 79 and 80. This information can also be placed on one keypunch card. Now let's examine a completed page 1.

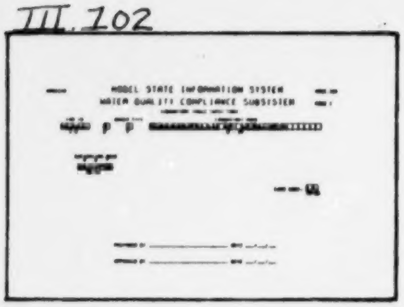
III.101



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

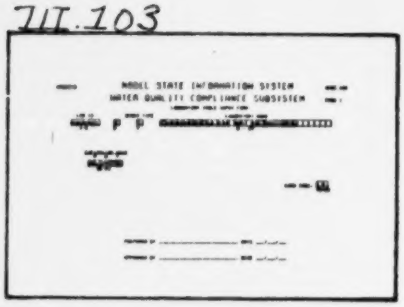
When the state certifies a lab to analyze water samples, it assigns the lab an ID number.

III.102


MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

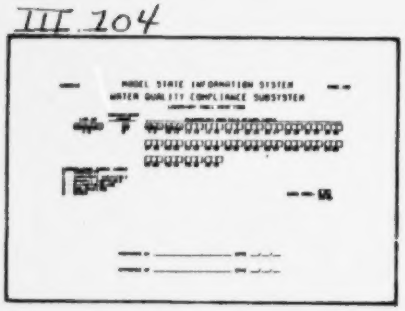
Position 6 is pre-printed and position 7 is the owner type. Acceptable values are determined by the state and described in the CVT.

III.103


MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

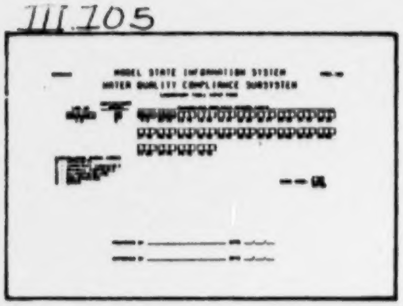
The lab name is entered in field 4, line 1, left-justified, and the certification expiration date on line 2.

III.104


MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

The first field repeats the laboratory ID, obviously, to insure that the information on page 2 is entered for the appropriate laboratory.

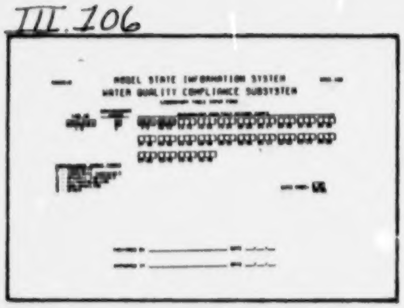
III.105



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

Field 2 allows us to enter a contaminant group code. The codes are described directly below these two fields in the key.

III.106



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

The remainder of this form allows the listing of up to 24 different analysis methods which the lab is certified to use for that particular contaminant group code.

III.107

- **Table Creation Input Forms**
  Error Message Table (EMT)
  Data Element Table (DET)
  Code Value Table (CVT)
  Laboratory Table (LBT)
  Regulations File (RGF) .

The Regulations File data for the federal regulations on water quality was provided when MSIS was installed. The Regulations File Input Forms are provided so that the state may enter its own regulations. As you may recall, state regulations must be at least as stringent as the federal ones.

III.108

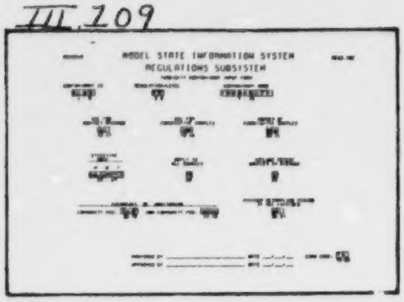
Regulations File
Contaminant Input Forms
Turbidity
Chemical
Bacteriological
Gross Alpha Radionuclide
Gross Beta Radionuclide

There are a total of eight Regulations File Input Forms. The five shown here specify the maximum contaminant level and the required sampling frequency for each contaminant.

The remaining three Regulations File Input Forms are special purpose forms and will be discussed later.

Of the forms shown here, the Turbidity Contaminant Input Form will be studied in detail, while each of the other four will be examined only briefly.

III.109

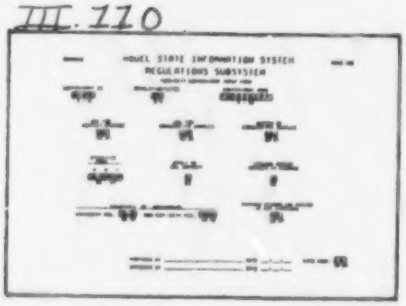


MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

Notice that in line 1, both the contaminant ID and name are pre-printed. This indicates that this form is used for only the turbidity contaminant. Also, only one keypunch card is required.

Now let's examine a completed form.

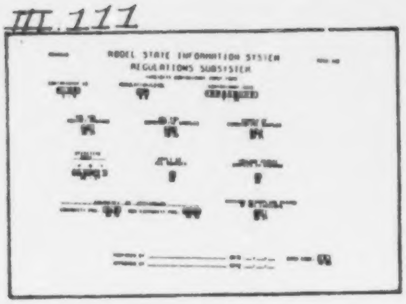
III.110



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The second field on this line permits the user to differentiate between federal and state regulations and between primary and secondary regulations. The first block of the two-block field is for the regulations entry and the second block is for the level entry. As an example, a federal secondary regulation would be entered as "FS" and a state primary regulation as "SP". If more than one condition exists, a separate input must be made for each condition. MSIS was designed to handle only "FP" or "SP" since no secondary regulations existed when it was designed.

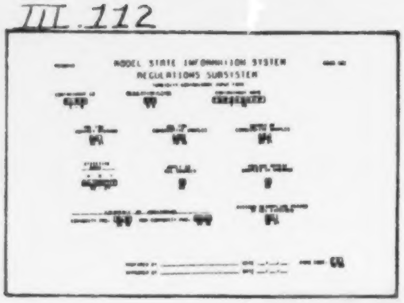
III.111



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The first two fields have to do with the maximum contaminant level for the computational technique used. Two fields were provided since the MCL established varies with the technique used. As indicated, the first field of line 2 is for the monthly average computation, while the second field is for the consecutive sampling computation. The third field specifies the number of samples for the consecutive sampling computation technique.

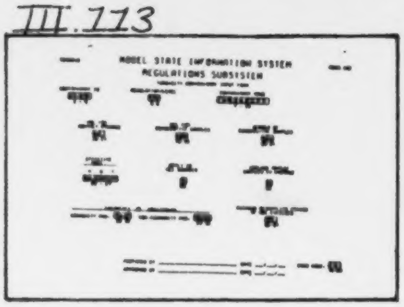
III.112



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

This field specifies the date that the regulation will become effective for the turbidity contaminant. For community PWS's, the federal regulations become effective 18 months after the promulgation date of the regulation, December 24, 1975, which gives an effective date for the regulations of June 24, 1977.

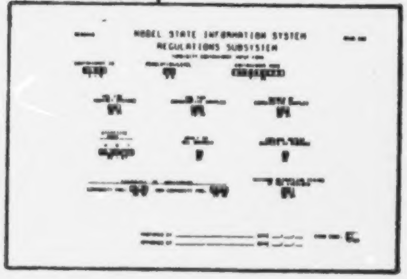
III.113



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The second field allows the state to indicate a simple choice of "yes" or "no" as to whether the turbidity monitoring requirements will apply to all water sources. This provision is necessary since the federal regulations require the monitoring of the turbidity contaminant in only those public water systems whose source of water is in whole or in part surface water; that is, rivers, lakes, and so forth.

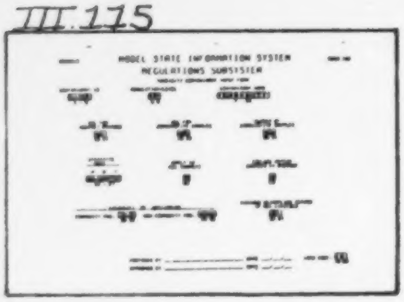
III.114



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The third field again is a simple "yes" - "no" choice by the state. MSIS provides an option as to whether to include the repeat samples in the average.

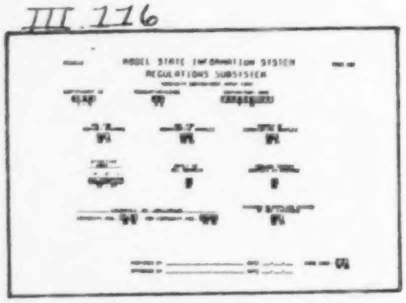
III.115



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The first two fields shown here allow the state to indicate the required frequency of monitoring for community and non-community PWS's in days per year. In the case of a community PWS, the federal regulations require a daily monitoring. The regulations are applicable to non-community PWS's as of June 24, 1979.

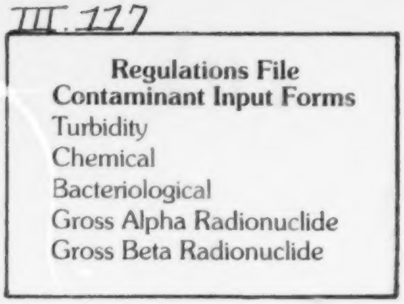
III.116



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The third and last field on line 4 controls the number of minutes that may lapse before the PWS must initiate check sampling as a result of an MCL violation. The example indicates 60 minutes, as specified in the federal regulations.

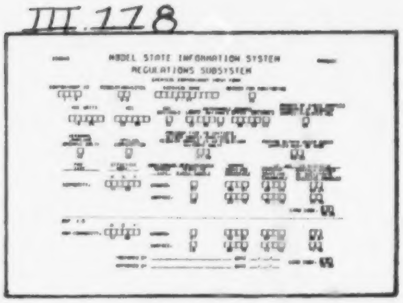
III.117



Regulations File
Contaminant Input Forms
Turbidity
Chemical
Bacteriological
Gross Alpha Radionuclide
Gross Beta Radionuclide

That concludes the detailed study of the Turbidity Contaminant Input Form. Now we will look briefly at a blank copy of each of the other four forms.

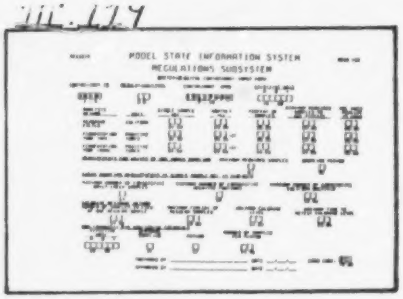
III.178



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

This form will be used for the ten organic and six inorganic chemical contaminants.

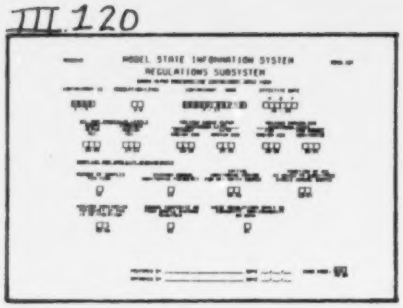
III.179



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

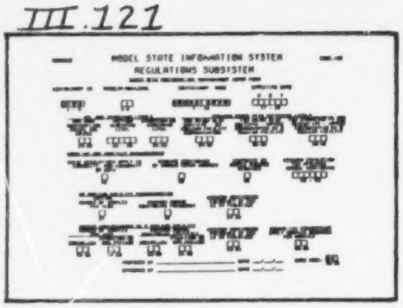
Since there is only one bacteriological contaminant, the contaminant ID and name can be pre-printed. You will find the ID on line 1, field 1, and the name, "COLIFORM", on line 1, field 3.

III.120


MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

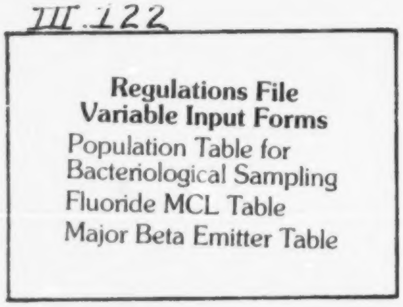
This input form also applies to a single contaminant whose ID is pre-printed on line 1, field 1, and name on line 1, field 3.

III.121


MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

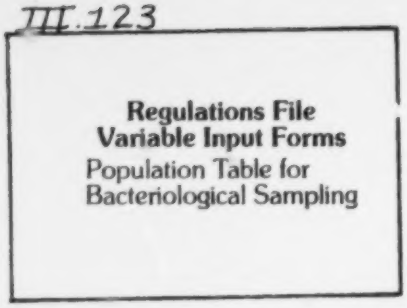
Our fifth Regulations File Input Form is for the Gross Beta Radionuclide Contaminant.

III.122


Regulations File
Variable Input Forms
Population Table for Bacteriological Sampling
Fluoride MCL Table
Major Beta Emitter Table

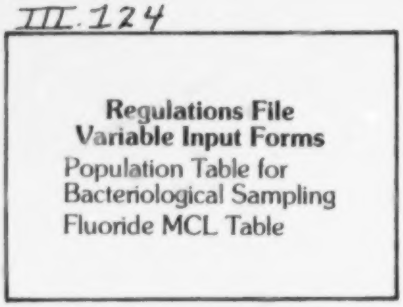
We will now consider the three special purpose forms. They are considered special purpose forms since they control either the MCL or sampling rates for some of the five contaminant categories last considered.

III.123


Regulations File
Variable Input Forms
Population Table for
Bacteriological Sampling

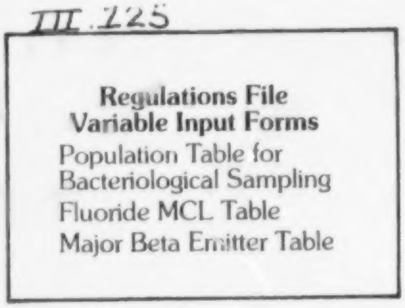
The Population Table for Bacteriological Sampling Input Form establishes the minimum samples per month for PWS's falling within a range established by the upper and lower population limit served.

III.124


Regulations File
Variable Input Forms
Population Table for
Bacteriological Sampling
Fluoride MCL Table

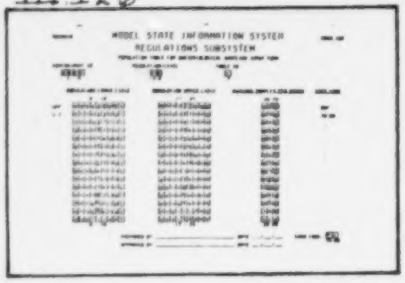
The Fluoride MCL Table Input Form permits entry of the allowable MCL for a temperature range.

III.125


Regulations File
Variable Input Forms
Population Table for
Bacteriological Sampling
Fluoride MCL Table
Major Beta Emitter Table

The Major Beta Emitter Table Input Form simply specifies particular beta emitters which must be monitored within the gross beta radionuclide category.

III.126

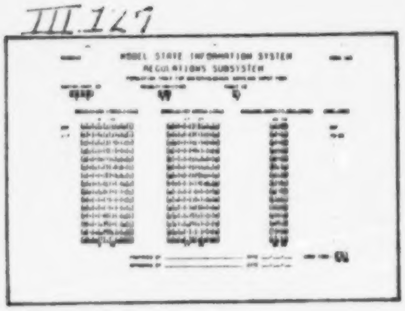


MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

We will now look in some detail at the Population Table for Bacteriological Sampling Input Form.

Let's go on to the form that is filled out.

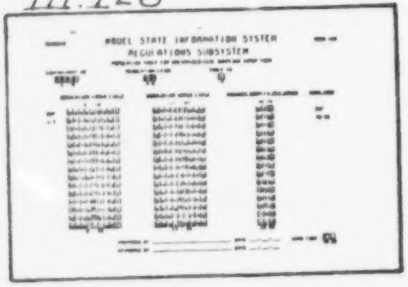
III.127



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

Field 1 is the pre-printed ID; field 2, the regulation type (federal or state) and level (primary or secondary). The "FP" entry here is for a federal, primary regulation. Field 3 is the Table ID.

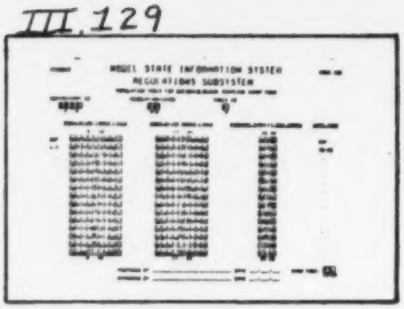
III.128



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

The purpose of this population entry is to establish the lower limit of the range...

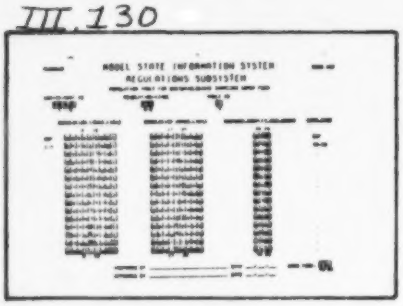
III.129



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

... and here to establish the upper limit of the range.

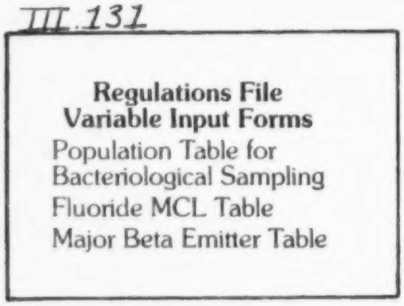
III.130



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

This column establishes the required number of samples per month for PWS's falling within the population range established. Here, it is 35 samples per month for PWS's with populations served of 28,001 to 33,000.

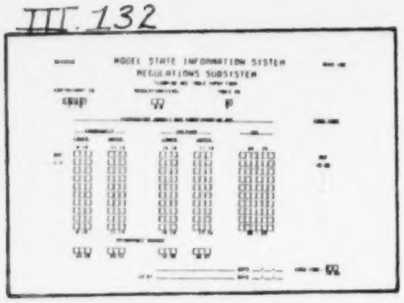
III.131



Regulations File
Variable Input Forms
Population Table for
Bacteriological Sampling
Fluoride MCL Table
Major Beta Emitter Table

Now we will look briefly at examples of the other two special purpose Regulations File Input Forms.

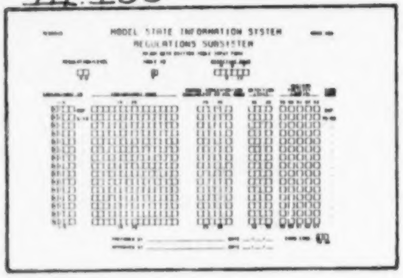
III.132



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

As you see, this form also establishes additional criteria for a contaminant. Here the contaminant is fluoride, not bacteria; the range is temperature, not population; and the restriction is on MCL, not on samples per month.

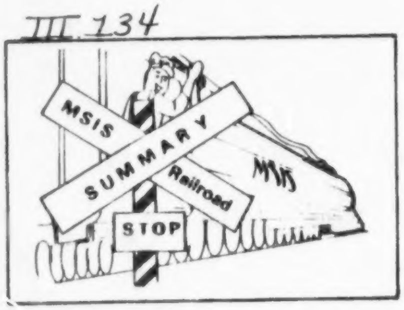
III.133



MODEL STATE INFORMATION SYSTEM
REGULATIONS SUBSYSTEM

As previously stated, this form allows for the identification of specific contaminants within the gross beta category for separate monitoring.

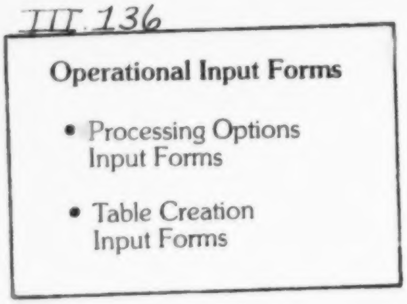
III.134



III.135

Well, that completes Unit I. We certainly looked at a lot of input forms, didn't we? Perhaps a brief review of the main categories will be helpful before we begin the exercises.

III.136



Operational Input Forms

- Processing Options Input Forms
- Table Creation Input Forms

We said that all MSIS input forms could be divided into two large categories: operational and informational. Unit I has covered the Operational Input Forms. Unit II will cover the Informational Input Forms.

We said that Operational Input Forms allow the user to supply the computer with information to perform its functions. Two categories of input forms were found here, Processing Options and Table Creation.

III.137

Processing Option Input Forms

PROC
SORT
SEL1 (Selection Criteria 1)
SEL2 (Selection Criteria 2)

We saw that the Processing Options category is itself divided into four subsets of input forms, all of which are used very frequently. The PROC form may indicate the date of the report, creation of a report or file, etc. The SORT form instructs the computer how the information should be sorted. SEL1 and SEL 2, as you will recall, always work together. Between the two, they specify the criteria for the computer to use in selecting records from certain MSIS files.

III.138

- **Table Creation Input Forms**
  Error Message Table (EMT)
  Data Element Table (DET)
  Code Value Table (CVT)
  Laboratory Table (LBT)
  Regulations File (RGF)

We examined the five types of Table Creation Input Forms. We saw that the Error Message Table Input Form enters the codes and corresponding messages for errors; that the Data Element Table Input Form enters a catalog number and corresponding information about data elements; that the Code Value Table Input Form enters a value or values to data elements; that the Laboratory Table Input Form enters characteristics of certified laboratories and their capabilities; and, finally, that the Regulations File Input Forms enters state and federal regulations concerning water quality for the states' public water systems. These regulations include maximum contaminant levels, contaminants, and sampling frequencies.

III.139

Review/Exercises

III.140

I realize that my talking and your listening in a one-way communication format makes it difficult to absorb this kind of detailed information. Diligent work on the review exercises contained in this course will help insure a more complete understanding of the material covered. Please work carefully on the input forms provided, studying the examples in great detail and using your workbook references as required.

III.141

Refer to:

III.1.E3
III.1.A3

III.1.E4
III.1.A4

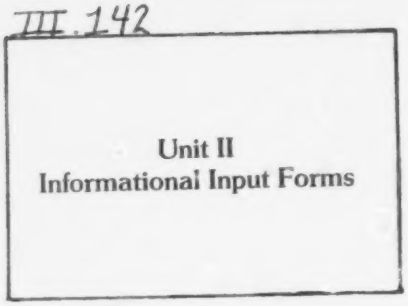
III.1.E5
III.1.A5

III.1.E6
III.1.A6

Your workbook exercises are shown here.

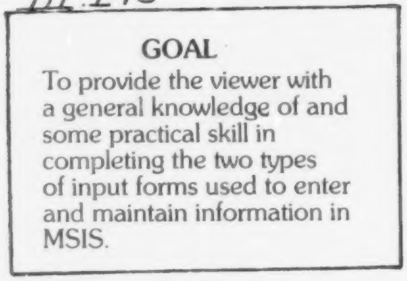
Change tray and cassette

III.142


Unit II
Informational Input Forms

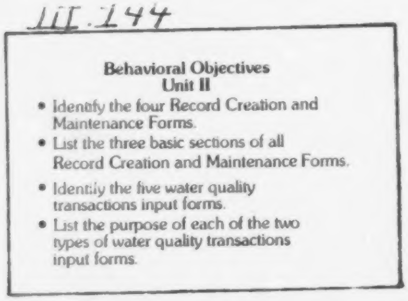
In Unit II we will be looking at the other broad category of input forms; that is, Informational Input Forms. As the name implies, these forms are used to input information which we want the computer to store and maintain.

III.143


GOAL
To provide the viewer with a general knowledge of and some practical skill in completing the two types of input forms used to enter and maintain information in MSIS.

This is the goal for Unit II.

III.144


Behavioral Objectives
Unit II

- Identify the four Record Creation and Maintenance Forms.
- List the three basic sections of all Record Creation and Maintenance Forms.
- Identify the five water quality transactions input forms.
- List the purpose of each of the two types of water quality transactions input forms.

And here are the behavioral objectives.

III.145

Sequence of Events

- Record Creation and Maintenance Input Forms
  Review/Exercises
- Water Quality Transactions Input Forms
  Review/Exercises

Material will be presented in this order

III.146

Informational Input Forms

- Record Creation and Maintenance
- Water Quality Transactions

Informational Input Forms are so named because they are used to input information such as PWS data which is to be stored on the computer files and tables. The Informational Input Forms category contains the Record Creation and Maintenance and the Water Quality Transactions Input Forms.

III.147

Informational Input Forms
- Record Creation and Maintenance

The Record Creation and Maintenance Input Forms, as a group, are used to enter information concerning the state's Public Water Systems into the computer files. Since this type of information is applicable to all subsystems maintaining PWS information, we note that the Record Creation and Maintenance Input Forms are used by PWSI, WAQC, VAEX, ENAC, and OPER. There is a total of 12 forms in this category.

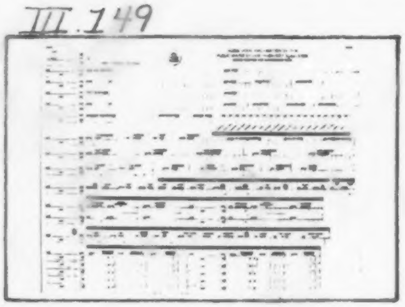
III.148

- **Record Creation and Maintenance Input Forms**

  Public Water System Inventory
  Variances and Exemptions
  Enforcement Actions
  Water Quality Compliance
  Operator and Mailing

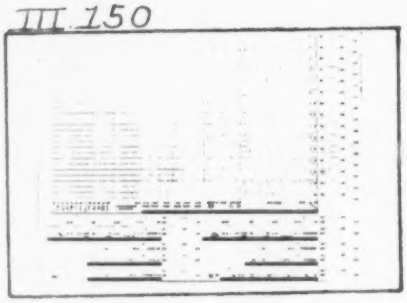
The input forms shown here are named from the subsystems where they are used. The first four forms, each with more than one part and with each part having a separate form number, total eleven forms. We will briefly consider each of the eleven. The fifth input form shown here is the Operator and Mailing Input Form. It will be studied in some detail.

III.149



This is Part 1 of the two-part PWSI Input Form. Both are used to input information to the Public Water File which maintains information on all PWS data.

III.150



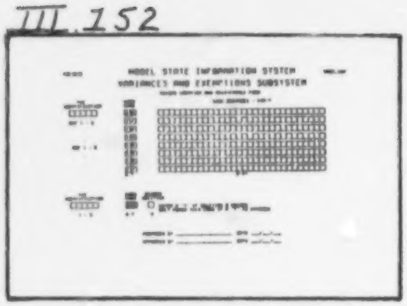
III.151

MODEL STATE INFORMATION SYSTEM
VARIANCES AND EXEMPTIONS SUBSYSTEM

Part 2 is shown here. An entirely different form is used to delete a record from the PWF.

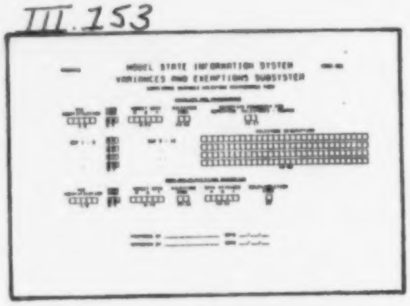
A group of three forms is used to input information to VAEX when an exemption or a variance is granted to a PWS. This is VAEX 100. It contains a card code of 00 for a record creation. The remainder of the form allows input of new or update information on variances or exemptions. See the eight lines at the bottom of the form headed, "Case Abstract". The abstract is continued on VAEX 107.

III.152



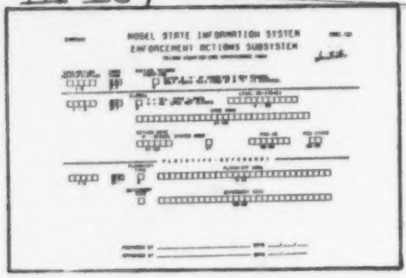
This is VAEX 107, the second of the three forms used by VAEX. It is used to input abstract information for a variance or exemption as shown in field 2 in lines 1-8. Card code 99 is used to delete a record as shown in the last data line, field 2.

III.153



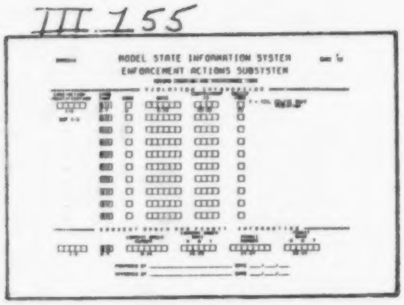
This is VAEX 101. It is used to report the progress of the PWS in meeting the full regulation requirements. Such progress is reported in lines 2-5, postions 16-45.

III.154


MODEL STATE INFORMATION SYSTEM
ENFORCEMENT ACTIONS SUBSYSTEM

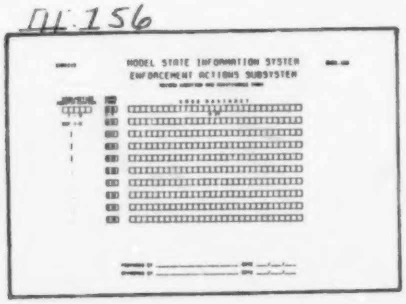
There are four Enforcement Actions Input Forms. This is ENAC 101. When a PWS incurs a violation, the state is required to take action to insure that the violation is corrected. The state uses this input form to record such action on the ENAC file. Notice the initial record creation in line 1, field 3.

III.155


MODEL STATE INFORMATION SYSTEM
ENFORCEMENT ACTIONS SUBSYSTEM

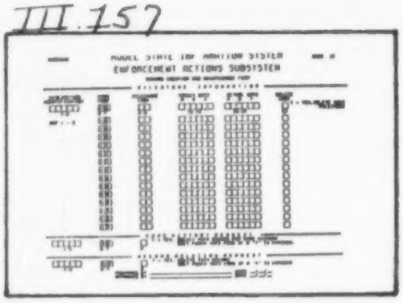
Enforcement actions are obviously a result of violations. This portion of the input form ENAC 102 identifies the violations enforcement actions.

III.156


MODEL STATE INFORMATION SYSTEM
ENFORCEMENT ACTIONS SUBSYSTEM

ENAC 103 allows the state to record an abstract of the enforcement actions. The state has a choice as to what it does or does not enter.

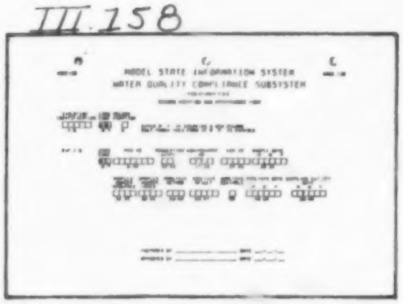
III.157



MODEL STATE INFORMATION SYSTEM
ENFORCEMENT ACTIONS SUBSYSTEM

ENAC 104 is used to enter milestone information, that is, progress reports. Milestones are specified steps which the PWS will take to obtain compliance. A record of those actions, their status, and their effectiveness is input with ENAC 104.

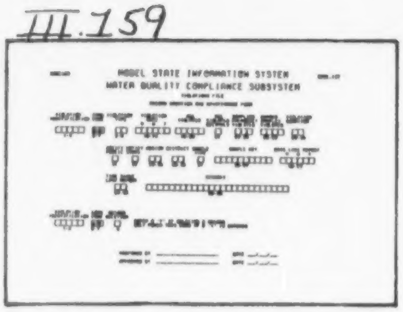
III.158



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

WAQC uses two input forms. The one shown here, WAQC 136, is used to input sample information related to a violation. The VIF is automatically updated when MCL and sampling violations occur. However, it is possible to input these and other violations directly to the VIF as they occur.

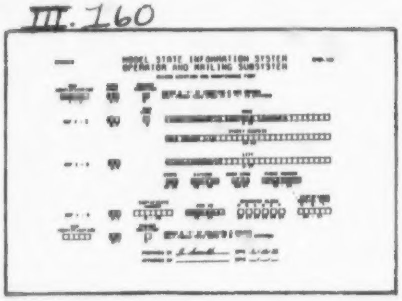
III.159



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

WAQC 137 is used to enter violation information or to delete the violation.

III.160

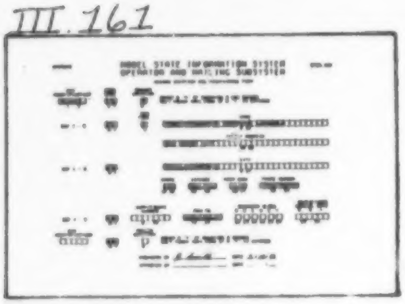


MODEL STATE INFORMATION SYSTEM
OPERATOR AND MAILING SUBSYSTEM

The OPER Input Form is used to enter and update names and addresses of PWS operators and others frequently contacted by the states. Only one form is used, and it will be examined in detail.

Note that field 2, the card code, is pre-printed on each data entry line. The first code of 00 is record creation. The next three (01, 02, and 03) identify address information. The last code, 99, is for record deletion.

III.161

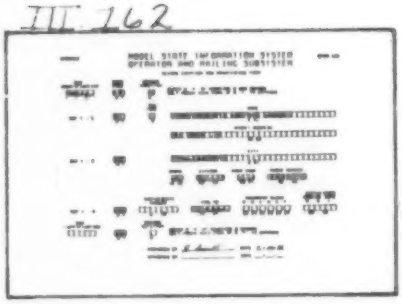


The first field contains the Operator and Mailing identification number, which is assigned by the state.

Field 2 contains the preprinted card code of 00 for record creation.

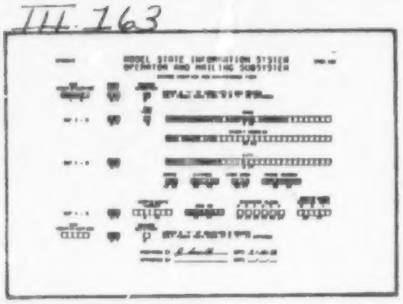
The third field establishes a new record if a "Y" is entered. As per instructions on the form, if no new record is desired, the entry line is left blank. Our example shows a record creation with the "Y" entry.

III.162



As you can see, the last line of data entry is quite similar to the first, except that it is used to delete a record.

III.163



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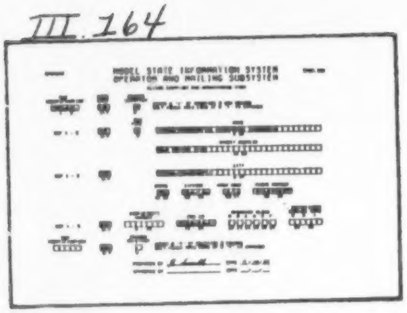
The first field in each line is for the O & M identification, thus placing the O & M ID on each keypunch card. The third field in line 2 is the O & M type, a state-assigned data element found on the CVT. It could identify a PWS, senator, or whatever. This form shows a "1" for a PWS.

The remainder of the information is for a complete address and phone number. The name and street address are left-justified.

III.164



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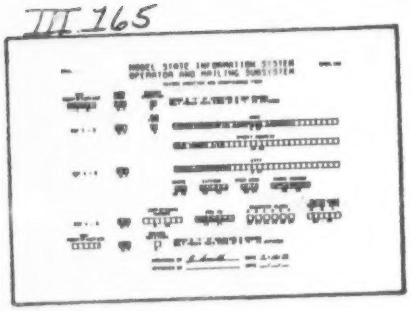
Again, we see the O & M identification and the preprinted card code in line 6. The next entry is for the state-assigned certificate number for the PWS operator (if appropriate).

III.165



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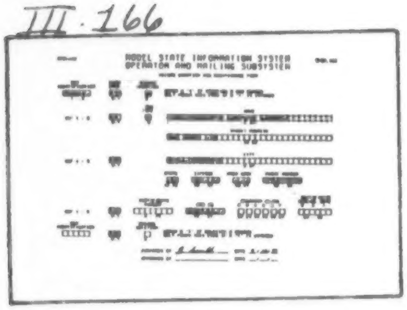
OPERATOR AND MAILING SUBSYSTEM

Field 4 is for the PWS ID, and positions 22 through 27 indicate the operator class.

III.166



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The last field is the renewal date for the PWS operator's state certificate. This example contains information for a PWS. Consequently, the fields for PWS operators are left blank.

No slide change

In reviewing the entire form, there are several things of particular note. First, if we want to create a new record, we complete line 1 and appropriate fields of information. Second, if we want to update an existing record, we omit position 8 in the first and last data entry lines and complete the appropriate fields with the update information. (Only the fields that are being changed need be entered.) Third, if we want to delete information from a record currently stored on the file, we complete only the last line.

III-167

MSIS
SUMMARY
Railroad
MSIS
STOP

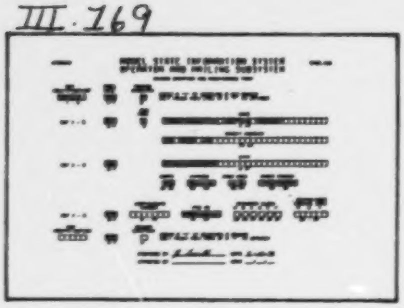
Let's summarize our consideration of the Record Creation and Maintenance Forms by looking again at the complete list of forms found in this category.

III-168

- **Record Creation and Maintenance Input Forms**
  Public Water System Inventory
  Variances and Exemptions
  Enforcement Actions
  Water Quality Compliance
  Operator and Mailing

Recall there are five subsystems in MSIS which are concerned with PWS-related data. These Record Creation and Maintenance Forms take their names from those subsystems. There are five types of Record Creation and Maintenance Input Forms, with all but Operator and Mailing having multiple parts. This adds to a total of 12 forms.

III.169



Take one last look at the completed form shown here. Remember that with this form we can create a new record, update an existing record, or delete a record from the OMF.

III.170

Review/Exercises

Your workbook contains a thorough review exercise on the Record Creation and Maintenance Input Forms. Examples of all forms in this category are included for your review. Please remember that additional help in filling out these forms may be obtained from the MSIS volume of Data Entry Instructions or the User's Manual.

III.171

Refer to: III.2.E1
III.2.A1

Your review exercises are located in your workbook as indicated.

STOP TAPE . . . COMPLETE REVIEW/EXERCISES

III.172

Informational Input Forms
- Record Creation and Maintenance
- Water Quality Transactions

Water Quality Transactions is the last of the four categories of input forms. Up until this point, we have considered Processing Options, Table Creation, and Record Creation and Maintenance Input Forms. Although the last considered, the Water Quality Transaction Input Forms are undoubtedly the most important since they are the workhorse forms of the MSIS. These forms are used hundreds of times every year to add or delete water quality information on the state's PWS's. Five input forms are found in this category.

III.173

- **Water Quality Transactions**
  - Bacteriological or Turbidity Analysis
  - Bacteriological or Turbidity Summary Analysis
  - Chemical or Radiological Analysis
  - Sample Deletion (PSF)
  - Sample Deletion (SAF)

All of the five WAQC input forms are concerned with two files maintained by WAQC, the Periodic Sample File (PSF) and the Sample Analysis File (SAF).

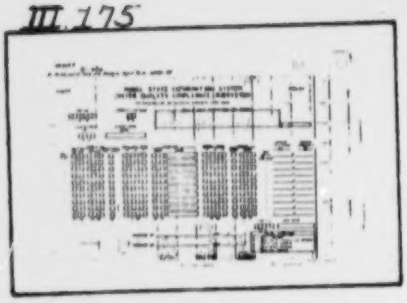
III.174

- **Water Quality Transactions**
  - Bacteriological or Turbidity Analysis
  - Bacteriological or Turbidity Summary Analysis
  - Chemical or Radiological Analysis

The three forms shown here are used to add or input data to the PSF and SAF. All of these forms are turn-around documents, meaning that the computer has already printed some information on them, but more information must be filled out by the PWS, the laboratory, or State Water Division personnel. Turn-around documents save time because only new information need be filled out by hand.

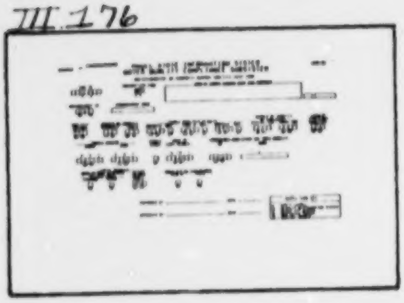
The first two forms will be examined briefly, and the last in more detail.

III.175



Note that this Bacteriological or Turbidity Analysis form permits invidivual sample data to be input.

III.176



Summary information is input with this Summary Analysis Input Form. The regulations allow either or both. Since the data required for bacteriological and turbidity analysis are very similar, one form is used for both.

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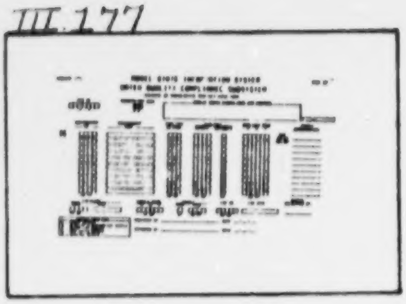
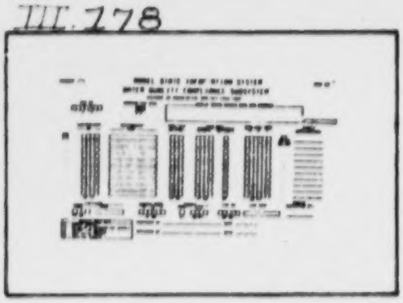
best available copy.

III.177



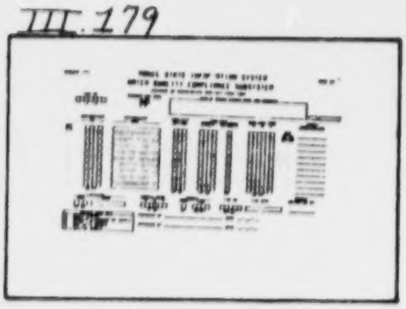
This Chemical or Radiological Analysis Input Form is the third and last form used to enter analysis information on the PSF. Note that the form has spaces for entering keypunch information as well as blank spaces for entering handwritten or typed information. As mentioned earlier, this form is used as a turnaround document with some information entered by the computer, some by the PWS and some by the lab. The completed form is then returned to the state for input to the WAQC subsystem.

III.178



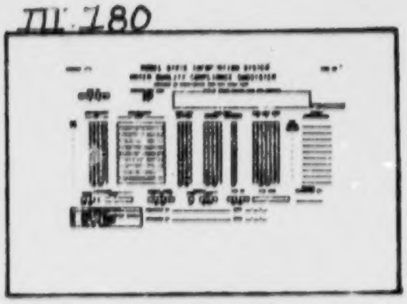
The WAQC subsystem completes the portion of the form shown here: the PWS ID, name and address, the contaminant ID and contaminant name. The form is then forwarded to the PWS.

III.179



The PWS completes the last data entry line shown here. Field 1 is the location code and name where the sample was collected. This entry is completed only for samples in violation or for check samples. Field 2 is for the date the sample was collected. Field 3 is a code for sample type; field 4 is the time the sample was collected, in hours and minutes (right-justified). Field 5 is the lab ID and field 6, the lab name. The PWS then forwards the form to the lab.

III-180



The lab performs the analysis and completes the rest of the form as shown here. The first field is the method used to analyze the sample. This is followed by the analysis results. Note that position 21 is headed "DECIMALS". This refers to the number of decimal positions in the field, positions 17-20. As an example, 4.010 would be three decimals and the number 3 would be entered in position 21. The example shown on the form is 0.020 for Arsenic. Field 4 is the usual six-position date. The next column is headed, "DUP 28-46 (BELOW). This is an instruction to the keypunch operator to enter the last data entry line, positions 28-46, on each card punched. This is certainly needed, since it contains the lab identification information. The last column shown here is not for input to the computer since no card positions are shown.

The completed form is then returned to the state for keypunch and entry to PSF.

III.181

- **Water Quality Transactions**

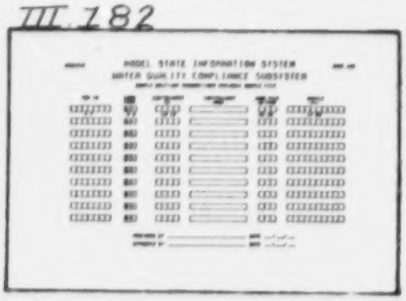
  Sample Deletion (PSF)
  Sample Deletion (SAF)

The Sample Deletion Transactions are used to delete records from the PSF and SAF respectively. Suppose that our input report, when compared with the original input forms, reveals that an error was made in entering PWS data on the PSF. Obviously, the error must be corrected.

We saw earlier that a routine use of Record Creation and Maintenance forms was to correct errors. However, two files, the PSF and SAF, contain the critical data used to determine PWS violations. As a consequence, a special procedure was adopted to guard against unnecessary file access.

That special procedure is a two-step process. In step one, a deletion input form is created, using the original input form and the resulting input report, and then entered. In step two, the entire corrected record is input, using one of the two input forms.

III 182



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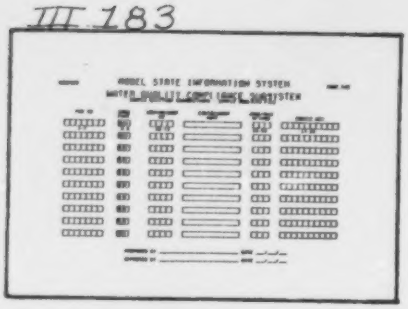
We see that this form is called the Sample Deletion Transactions Periodic Sample File, meaning that it will delete entire records from the PSF.

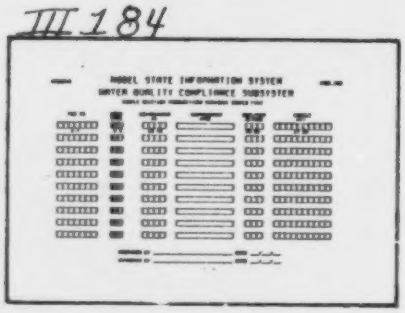
An identical form the Sample Deletion Transactions Sample and Analysis File, is used to delete records from the SAF for the same reason just discussed, file security.

III 183



MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

III 184



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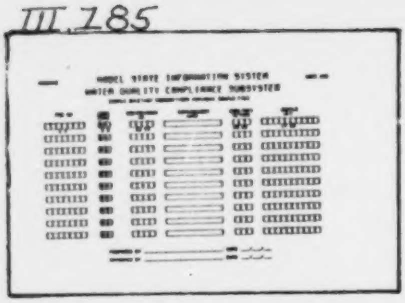
WATER QUALITY COMPLIANCE SUBSYSTEM

The only difference in the forms is their name and form number.

Let's look at the PSF example in more detail.

First note that this form contains 10 lines of keypunch information for 10 cards, and that all lines are identical. The first field in each line is for the PWS ID. This is followed by the pre-printed card code. The 01 card code shown here is for record deletion.

III.185



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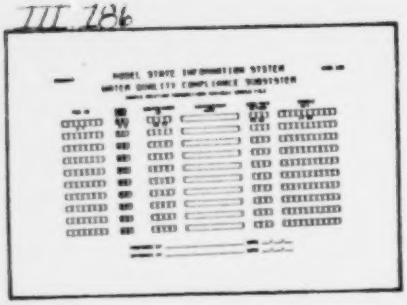
These two columns are for the contaminant ID and name, found on the original input form. Notice that the contaminant name has not been assigned any position numbers and therefore is not to be keypunched.

III.186



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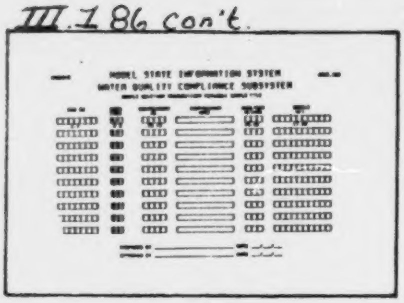
WATER QUALITY COMPLIANCE SUBSYSTEM

The first column shown here provides a space for entering the code for the analysis method, again found on the original input form. The last column is for the sample key, which is found on the input report.

III.186 con't.

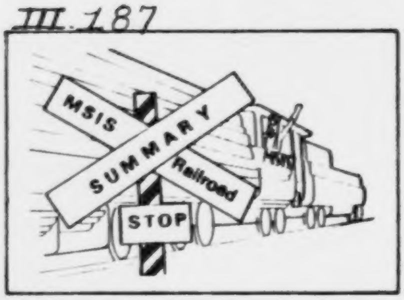


MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM

In summary, this form and its identical counterpart for the SAF are used to delete records from the Periodic Sample File and the Sample Analysis File, respectively.

Since the card contains provisions for 10 identical entries, 10 separate deletions could be made with one input form.

III.187

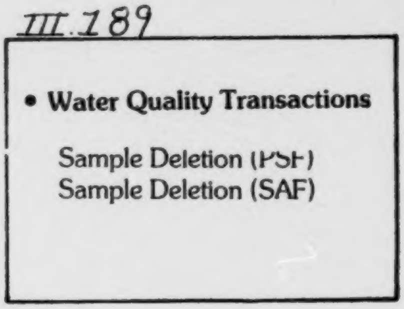


III.188

- **Water Quality Transactions**
  Bacteriological or Turbidity Analysis
  Bacteriological or Turbidity Summary Analysis
  Chemical or Radiological Analysis

In summary, the three forms shown here are used to enter data on the PSF...

III.189



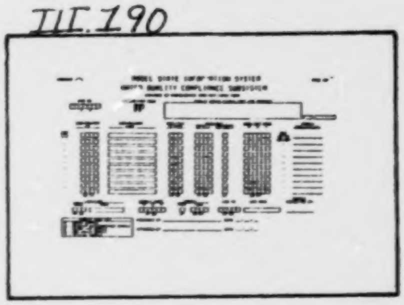
- **Water Quality Transactions**

  Sample Deletion (PSF)
  Sample Deletion (SAF)

...while these two forms are used to delete records from the PSF and SAF respectively.

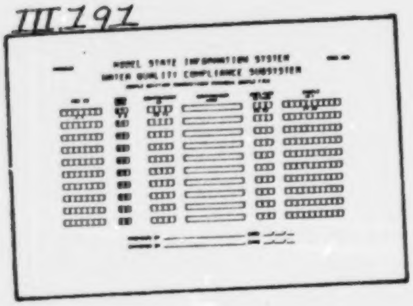
Now let's look briefly at examples of the Chemical or Radiological Analysis and the Sample Deletion Transactions (PSF) Input Forms.

III.190



Used as a turnaround document, this form is generated by WAQC. Both the PWS and the lab complete parts of the form. This input form is a real workhorse of the system. Each form is specific to the PWS concerned and contains entries for 10 contaminants, the analysis method used, and the analysis results obtained by the laboratory.

III.191

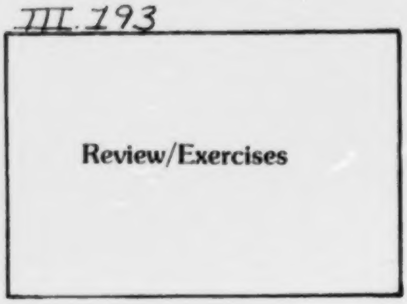


This Sample Deletion Transactions form for the PSF provides for the deletion of information from the PSF An identical form performs the same function for the SAF.

III.192

That concludes the study of the Water Quality Transactions Input Forms. At this point all MSIS input forms have been studied, and our journey through this course is complete. Since this will be your last opportunity to study the MSIS input forms, you are urged to take full advantage of this review exercise.

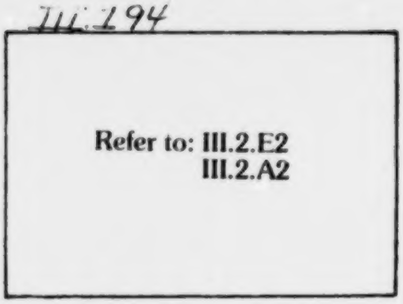
III.193



Review/Exercises

Input forms really are the heart of the MSIS because it is only through their use that information can be entered on the computer files and tables. This information is then used by the computer to produce the output reports for the user, you and me.

III.194



Refer to: III.2.E2
III.2.A2

Your review exercise is contained in your workbook as shown.

STOP TAPE . . . COMPLETE REVIEW/EXERCISES

III.195

Post Test

Don't forget your post-test. It will indicate for you the level you have attained in this unit.

III.196

Refer to: III.2.T1

With this information, you can then make a decision regarding additional review or training that you think necessary for use in your current job assignment.

III.1.T1
31T1
(1-4)

PRE-TEST

DATA ENTRY

Name:____________________ Postal Code ____ Date ____/____/____
(5-30) (31-2) Month Day Year
(33-8)

1. Match the following functions with their appropriate subsystems:

Subsystem

- a. Regulations
- b. Enforcement Actions
- c. Water Quality Compliance
- d. Variances & Exemptions
- e. Standard Processing

Function

(39) ___Maintains information on PWS's that have special conditions

(40) ___Does the checking on the analyses of water quality

(41) ___Maintains information on the activities ensuring compliance

(42) ___Gives the computer information to determine violations

(43) ___Performs common functions among subsystems

2. Match the types of input forms with their function:

Form

- a. Processing option
- b. Table creation
- c. Record creation & maintenance
- d. Water quality transactions

Function

(44) ___Enters PWS-related data to files

(45) ___Enters data to MSIS tables

(46) ___Enters sample and analysis data

(47) ___Enables the user to specify a needed PWS listing

(48) ___Enables the user to specify needed reports

3. Circle the abbreviations for the 5 subsystems which have Record creation and maintenance input forms:

(49) a. BIPS
(50) b. WAQC
(51) c. OPER
(52) d. LIMT
(53) e. FEDR
(54) f. VAEX
(55) g. REGS
(56) h. ENAC
(57) i. SRVY
(58) j. MSIS
(59) k. PWSI
(60) l. QUAL

4. Circle T (True) or F (False) for each of the following statements:

T F (61) "SORT" is a processing option input form used to specify desired sequence of records for output.

T F (62) "SEL2" is a processing option input form used to initiate a program.

T F (63) "SEL1" is the processing option input form used to select records from MSIS files.

T F (64) A program run cannot be initiated without using a "PROC" form.

T F (65) The Laboratory input form is seldom used because the laboratory table is supplied by MSIS.

T F (66) A State used the Code Value Table input form to enter its own acceptable data element values.

T F (67) The Data Element Table input form is used to enter a detailed description of information about a data element.

T F (68) A Record Creation and Maintenance input form is used to change PWS data.

T F (69) Water Quality Transactions input forms are used either to add or to delete sample and analysis data.

T F (70) The records on the Periodic Sample File and Sample Analysis File can be changed without deleting the entire record.

5. The Data Element Table input form cannot be used to identify which of the following:

(71) a. Which file used in
(72) b. New error code
(73) c. Name for field
(74) d. New catalogue number

6. Check the Water Quality Transaction input forms:

(75) a. ____Bacteriological or Turbidity Analysis
(76) b. ____Inorganic Chemical Contaminant
(77) c. ____Chemical or Radiological Analysis
(78) d. ____Sample Deletion Transactions
(79) e. ____Physical Contaminant Summary

7. Rate your current level of knowledge about MSIS: (Circle one)

(80)None (81)A little (82)Some (83)Quite a bit (84)A great deal

EXERCISES

Processing Option Input Forms

1. Identify each of the processing option input forms shown.

1. ______________________________

2. ______________________________

3. ______________________________

4. ______________________________

OPER020

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OPER.105

SELECTION FORM - DEFINITION OF LOGIC FOR SELECTION

RELATION SYMBOLS:
LT = LESS THAN
EQ = EQUAL
GT = GREATER THAN
NL = NOT LESS THAN
NG = NOT GREATER THAN
NX = NOT EXISTS(EMPTY)

CARD ID	DATA ELEMENT LOGIC ID NO.	RELATION SYMBOL	DATA ELEMENT LOGIC ID NO.	RELATION SYMBOL	DATA ELEMENT LOGIC ID NO.	RELATION SYMBOL	DATA ELEMENT LOGIC ID NO.	RELATION SYMBOL
S E L 2 1-4	01	☐☐ 5-6	02	☐☐ 7-8	03	☐☐ 9-10	04	☐☐ 11-12
	05	☐☐ 13-14	06	☐☐ 15-16	07	☐☐ 17-18	06	☐☐ 19-20
	09	☐☐ 21-22	10	☐☐ 23-24	11	☐☐ 25-26	12	☐☐ 27-28
	13	☐☐ 29-30	14	☐☐ 31-32	15	☐☐ 33-34	16	☐☐ 35-36
	17	☐☐ 37-38	18	☐☐ 39-40	19	☐☐ 41-42	20	☐☐ 43-44
	21	☐☐ 45-46	22	☐☐ 47-48	23	☐☐ 49-50	24	☐☐ 51-52
	25	☐☐ 53-54	26	☐☐ 55-56	27	☐☐ 57-58	28	☐☐ 59-60
	29	☐☐ 61-62	30	☐☐ 63-64	31	☐☐ 65-66	32	☐☐ 67-68
	33	☐☐ 69-70	34	☐☐ 71-72	35	☐☐ 73-74		

PREPARED BY ______________________ DATE __/__/__

APPROVED BY ______________________ DATE __/__/__

①

OPER010

MODEL STATE INFORMATION SYSTEM

OPER.101

OPERATOR AND MAILING SUBSYSTEM

PROCESSING OPTIONS FOR JOB ______________

CARD ID	DATE M D Y
P R O C	☐☐☐☐☐☐
1-4	5-10

STANDARD ERROR PROCESSING OPTIONS:

☐ 11
Y = YES - CREATE A SPECIAL OUTPUT FILE OF ERROR RECORDS
N = NO - DO NOT CREATE A SPECIAL OUTPUT FILE

☐ 12
Y = YES - PRINT ONLY THE DATA ELEMENT FIELDS WHICH WERE
N = NO. IN ERROR - NOT THE ENTIRE RECORD

STANDARD HISTORY PROCESSING OPTION:

☐ 13
SELECT THE CODE FOR THE TYPE OF HISTORY REPORT TO BE PRINTED
1 = ONLY NEW STANDARD HISTORY FILE RECORDS
2 = ALL THE STANDARD HISTORY FILE RECORDS WHICH WERE EVER CREATED FROM THIS SUBSYSTEM
3 = THE ENTIRE STANDARD HISTORY FILE
4 - DO NOT PRINT A REPORT

②

PREPARED BY ______________________________ DATE __/__/__

APPROVED BY ______________________________ DATE __/__/__

MODEL STATE INFORMATION SYSTEM
OPERATOR AND MAILING SUBSYSTEM

SELECTION FORM - DEFINITION OF DATA ELEMENTS

CARD ID	DATA ELEMENT MNEMONIC NAME	DATA ELEMENT COMPARATIVE VALUE	DATA ELEMENT LOGIC ID NO.
S E L 1	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
1-4	5-14	15-29	30-31
DUP 1 - 4	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐
.	☐☐☐☐☐☐☐☐☐☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	☐☐

III.1.E1

③

PREPARED BY ______________________________ DATE __/__/__

APPROVED BY ______________________________ DATE __/__/__

OPER020 OPER.103

MODEL STATE INFORMATION SYSTEM
OPERATOR AND MAILING SUBSYSTEM

SORT OPTIONS FOR JOB ______________

CARD ID	SORT SEQUENCE	MNEMONIC NAME OF DATA ELEMENT	SORT MODE	
S O R T 1-4	☐☐ 5-6	☐☐☐☐☐☐☐☐☐☐ 7-16	☐ 17	A=ASCENDING D=DESCENDING
	☐☐ 18-19	☐☐☐☐☐☐☐☐☐☐ 20-29	☐ 30	A=ASCENDING D=DESCENDING
	☐☐ 31-32	☐☐☐☐☐☐☐☐☐☐ 33-42	☐ 43	A=ASCENDING D=DESCENDING
	☐☐ 44-45	☐☐☐☐☐☐☐☐☐☐ 46-55	☐ 56	A=ASCENDING D=DESCENDING
	☐☐ 57-58	☐☐☐☐☐☐☐☐☐☐ 59-68	☐ 69	A=ASCENDING D=DESCENDING

PREPARED BY ______________________ DATE ___/___/___

APPROVED BY ______________________ DATE ___/___/___

④

III.1.E1

III.1.E2

Processing Option Input Forms

1. Match each function with the appropriate processing option input form.

1. SEL2 ____________________
2. PROC ____________________
3. SEL1 ____________________
4. SORT ____________________

a. Used to specify a desired sequence of records.

b. Used to specify the logic for selection.

c. Used to initiate a program and specify the date of the report.

d. Used to define data elements for selection of records.

III.1.E3

Table Creation (MSIS)

1. State the purpose of the Error Message Table Input Form. ____________

____

____

Circle the best valid entries.

A.	AAA	INVALID-RECORD-ID
B.	001	REJECT-INVALID RECORD-ID
C.	011	REJECTED
D.	107	WARNING-DATA ELEMENT MISSING

Estimate the frequency of use, by circling one of the following.

Often Occasionally Seldom Never

2. State the purpose of the Data Element Table Input Form. ____________

____

____

Circle the letter of the group of the best valid entries.

A.	LB	319	96	0096	81	81	LB-ID	N
B.	OM	490	22	0133	06	01	TRANSACTION	Y
C.	PH	310	00	0001	00	07	PH-PWS-ID	Y
D.	NO	310	91	0091	01	01	PW-ID	N

Estimate the frequency of use by circling one of the following:

Often Occasionally Seldom Never

3. State the purpose of the Code Value Table Input Form. ____________

____

____

Circle the letter of the group of best valid entries.

A.	LB	809	001	3	NEPHELOMETRIC
B.	02	321	P	1	PUBLIC WATER SUPPLY
C.	MS	ABC	0100	4	TURBIDITY
D.	OM	479	1	2	PUBLIC WATER SYSTEM - COM

Estimate the frequency of use by circling one of the following.

Often Occasionally Seldom Never

MSIS030

MODEL STATE INFORMATION SYSTEM

STANDARD PROCESSING SUBSYSTEM

MSIS.102

ERROR MESSAGE TABLE INPUT FORM

CARD ID	FILE ID	ERROR CODE	ERROR MESSAGE
1 1	M S 2-3	☐☐☐ 4-6	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 7-34
		☐☐☐ 35-37	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 38-65
DUP 1-3		☐☐☐ 4-6	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 7-34
		☐☐☐ 35-37	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 38-65
DUP 1-3		☐☐☐ 4-6	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 7-34
		☐☐☐ 35-37	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 38-65
DUP 1-3		☐☐☐ 4-6	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 7-34
		☐☐☐ 35-37	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 38-65
DUP 1-3		☐☐☐ 4-6	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 7-34
		☐☐☐ 35-37	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 38-65

PREPARED BY ______________________________ DATE ___/___/___

APPROVED BY ______________________________ DATE ___/___/___

MSIS030

MODEL STATE INFORMATION SYSTEM

MSIS.104

STANDARD PROCESSING SUBSYSTEM

DATA ELEMENT TABLE INPUT FORM

CARD ID	FILE ID	D.E. CATALOGUE NUMBER	START POSITION TRANSACTION /	FILE	D.E. LENGTH	D.E. INPUT LENGTH	MNEMONIC NAME	HISTORY KEPT	
3 1	☐☐ 2-3	☐☐☐ 4-6	☐☐ 7-8	☐☐☐☐ 9-12	☐☐ 13-14	☐☐ 15-16	☐☐☐☐☐☐☐☐☐☐ 17-26	☐ 27	Y=YES N=NO
DUP 1	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO
.	☐☐	☐☐☐	☐☐	☐☐☐☐	☐☐	☐☐	☐☐☐☐☐☐☐☐☐☐	☐	Y=YES N=NO

PREPARED BY ______________________________ DATE __/__/__

APPROVED BY ______________________________ DATE __/__/__

MSIS030

MODEL STATE INFORMATION SYSTEM

MSIS.103

STANDARD PROCESSING SUBSYSTEM

CODE VALUE TABLE INPUT FORM

CARD ID	FILE ID	D.E. CATALOGUE NUMBER	D.E. VALUE	D.E. LENGTH	D.E. DESCRIPTION
2	☐☐	☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
1	2-3	4-6	7-15	16	17-46
DUP 1-3		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
.		☐☐☐	☐☐☐☐☐☐☐☐☐	☐	☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

PREPARED BY ______________________ DATE __/__/__

APPROVED BY ______________________ DATE __/__/__

III.1.E3

Table Creation (WAQC)

WAQC.101 & WAQC.102

1. State the purpose of the Laboratory Table Input Forms. ______________

____

____

Circle the letter of the group of best valid entries on WAQC.101.

A.	00001	A	LAB OF DENVER	006178
B.	A1234	0	OHIO STATE LAB	062478
C.	16891	B	COMMONWEALTH OF VIRGINIA STATE LAB	07/01/79
D.	1256	1	OTHER	121578

Circle the letter of the group of best valid entries on WAQC.102.

A.	00001	5	111
B.	A268	4	689
C.	10006	0	26
D.	10001	1	001

Estimate the frequency of use by circling one of the following.

Often　　Occasionally　　Seldom　　Never

WAQC210

MODEL STATE INFORMATION SYSTEM

WATER QUALITY COMPLIANCE SUBSYSTEM

WAQC.101

PAGE 1

LABORATORY TABLE INPUT FORM

LAB ID ☐☐☐☐☐ 1-5

9 6

OWNER TYPE ☐ 7

LABORATORY NAME ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ 8 - 37

EXPIRATION DATE
M D Y
☐☐☐☐☐☐ 38-43

CARD CODE: L 1 79-80

PREPARED BY ______________________ DATE __/__/__

APPROVED BY ______________________ DATE __/__/__

WAQC210 WAQC.102

MODEL STATE INFORMATION SYSTEM
WATER QUALITY COMPLIANCE SUBSYSTEM
LABORATORY TABLE INPUT FORM

LAB ID	CONTAMINANT GROUP
☐☐☐☐☐	☐
1-5	6

AUTHORIZED ANALYSIS METHOD CODES

☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	31-33	34-36
☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	64-66
☐☐☐	☐☐☐	☐☐☐	☐☐☐						
67-69	70-72	73-75	76-78						

CONTAMINANT GROUP CODES
0 - TURBIDITY
1 - INORGANIC CHEMICALS
2 - ORGANIC CHEMICALS
3 - MICROBIOLOGICAL
4 - RADIONUCLIDE
8 - OTHER

CARD CODE: L 2
79-80

PREPARED BY ______________________ DATE ___/___/___

APPROVED BY ______________________ DATE ___/___/___

Table Creation (REGS)

1. Name the five Regulations File input forms for contaminants.

____

____

____

____

____

2. Name the three other Regulations File input forms designed for special conditions of certain contaminants. ____________________

____

____

3. Estimate the frequency of use of the Regulations File input forms by circling one of the following.

Often Occasionally Seldom Never

Table Creation (REGS)

1. Specify the purpose of the Regulations File input forms for contaminants. ______________________________

2. Explain the purpose of the Regulations File input forms for special conditions. ______________________________

Record Creation and Maintenance Forms

1. Identify the five Record Creation and Maintenance Forms by the subsystem in which they are used.

____

____

____

____

____

2. List the three basic sections of the Record Creation and Maintenance Forms by the function to be performed.

____

____

____

3. What is the common characteristic of all Record Creation and Maintenance Forms and why?

____

____

____

Water Quality Transactions Input Forms

1. Identify the five Water Quality Transactions input forms.

2. List the two basic types of Water Quality Transactions input forms by the function they perform.

3. How do the functions of the Water Quality Transactions input forms differ from those for the Record Creation and Maintenance forms?

4. Why is summary information allowed for Bacteriological and Turtidity analysis data?

ANSWERS

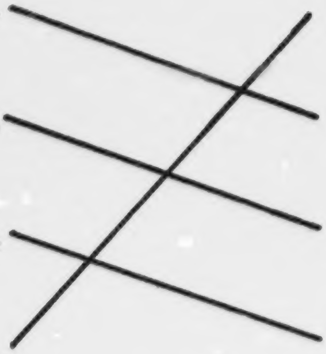
Processing Option Input Forms

1. Identify each of the processing option input forms shown.

1. SEL2
2. PROC
3. SEL1
4. SORT

Processing Option Input Forms

1. Match each function with the appropriate processing option input form.



1. SEL2	a. Used to specify a desired sequence of records.
2. PROC	b. Used to specify the logic for selection.
3. SEL1	c. Used to initiate a program and specify the date of the report.
4. SORT	d. Used to define data elements for selection of records.

Table Creation (MSIS)

1. State the purpose of the Error Message Table Input Form. to define and enter error codes with error messages.

Circle the best valid entries.

A. AAA INVALID-RECORD-ID
B. 001 REJECT-INVALID RECORD-ID
C. 011 REJECTED
[✓ D.] 107 WARNING-DATA ELEMENT MISSING

Estimate the frequency of use, by circling one of the following.

Often Occasionally [✓ Seldom] Never

2. State the purpose of the Data Element Table Input Form. to define and enter data element mnemonic names with the file(s) used on, catalogue number, the file and transaction starting positions and lengths, and whether or not history records should be maintained.

Circle the letter of the group of the best valid entries.

A.	LB	319	96	0096	81	81	LB-ID	N
B.	OM	490	22	0133	06	01	TRANSACTION	Y
[✓ C.]	PH	310	00	0001	00	07	PH-PWS-ID	Y
D.	NO	310	91	0091	01	01	PW-ID	N

Estimate the frequency of use by circling one of the following:

Often Occasionally [✓ Seldom] Never

3. State the purpose of the Code Value Table Input Form. to define and enter data elements by catalogue number with file(s), valid value(s)

Circle the letter of the group of best valid entries.

[✓ A.]	LB	809	001	3	NEPHELOMETRIC
B.	02	321	P	1	PUBLIC WATER SUPPLY
C.	MS	ABC	0100	4	TURBIDITY
D.	OM	479	1	2	PUBLIC WATER SYSTEM - COM

Estimate the frequency of use by circling one of the following.

Often Occasionally [✓ Seldom] Never

Table Creation (WAQC)

AQC.101 & WAQC.102

. State the purpose of the Laboratory Table Input Forms. to define and enter approved laboratory identifications with the type of owner, name, effective period, the contaminants it is approved to analyze for, and the methods it has been approved to use.

Circle the letter of the group of best valid entries on WAQC.101.

A.	00001	A	LAB OF DENVER	006178
[✓ B.]	A1234	0	OHIO STATE LAB	062478
C.	16891	B	COMMONWEALTH OF VIRGINIA STATE LAB	07/01/79
D.	1256	1	OTHER	121578

Circle the letter of the group of best valid entries on WAQC.102.

A.	00001	5	111
B.	A268	4	689
C.	10006	0	26
[✓ D.]	10001	1	001

Estimate the frequency of use by circling one of the following.

Often [✓ Occasionally] Seldom Never

Table Creation (REGS)

1. Name the five Regulations File input forms for contaminants.

Bacteriological Contaminant Input Form

Turbidity Contaminant Input Form

Chemical Contaminant Input Form

Gross Alpha Radionuclide Contaminant Input Form

Gross Beta Radionuclide Contaminant Input Form

2. Name the three other Regulations File input forms designed for special conditions of certain contaminants. Population Table for Bacteriological Sampling Input Form, Fluoride MCL Table Input Form, Major Beta Emitter Table Input Form.

3. Estimate the frequency of use of the Regulations File input forms by circling one of the following.

Often Occasionally [✓ Seldom] Never

Table Creation (REGS)

1. Specify the purpose of the Regulations File input forms for contaminants. to define and enter contaminant MCL's and sampling frequencies under the various conditions specified in the federal and/or State regulations.

2. Explain the purpose of the Regulations File input forms for special conditions. to define and enter the relationships between: the population served by a PWS and the required sampling frequency for Bacteriological contaminant(s); the annual average of maximum daily air temperatures and the Fluoride MCL; and the major beta emitters and their annual concentrations equivalent to the Gross Beta MCL and their concentrations which can be counted with a precision of plus or minus 100% at the 95% confidence level.

Record Creation and Maintenance Forms

1. Identify the five Record Creation and Maintenance Forms by the subsystem in which they are used.

PWSI

WAQC

VAEX

ENAC

OPER

2. List the three basic sections of the Record Creation and Maintenance Forms by the function to be performed.

add

change

delete

3. What is the common characteristic of all Record Creation and Maintenance Forms and why?

PWS-ID; to associate information on various files to the respective public water systems to which it relates.

Water Quality Transactions Input Forms

1. Identify the five Water Quality Transactions input forms.

   Sample Deletion Transactions - PSF

   Sample Deletion Transactions - SAF

   Bacteriological or Turbidity Analysis Input Form

   Bacteriological or Turbidity Analysis Summary Input Form

   Chemical or Radiological Analysis Input Form

2. List the two basic types of Water Quality Transactions input forms by the function they perform.

   add

   delete

3. How do the functions of the Water Quality Transactions input forms differ from those for the Record Creation and Maintenance forms?

   The Record Creation and Maintenance Forms allow changes to existing records on the file and Water Quality Transaction records must be completely deleted and re-entered to be corrected.

4. Why is summary information allowed for Bacteriological and Turbidity analysis data?

   The federal regulations require public water systems to report summary analysis information under certain conditions for these two contaminants due to the large volume of this information.

III.2.T1
31T1
(1-4)

POST-TEST

DATA ENTRY

Name:______________________ (5-30) ________ Postal Code (31-2) Date ____/____/____ Month Day Year (33-8)

1. Match the following functions with their appropriate subsystems:

Subsystem		Function
a. Regulations	(39)	____Maintains information on PWS's that have special conditions
b. Enforcement Actions	(40)	____Does the checking on the analyses of water quality
c. Water Quality Compliance	(41)	____Maintains information on the activities ensuring compliance
d. Variances & Exemptions	(42)	____Gives the computer information to determine violations
e. Standard Processing	(43)	____Performs common functions among subsystems

2. Match the types of input forms with their function:

Form		Function
a. Processing option	(44)	____Enters PWS-related data to files
b. Table creation	(45)	____Enters data to MSIS tables
c. Record creation & maintenance	(46)	____Enters sample and analysis data
d. Water quality transactions	(47)	____Enables the user to specify a needed PWS listing
	(48)	____Enables the user to specify needed reports

3. Circle the abbreviations for the 5 subsystems which have Record creation and maintenance input forms:

(49) a. BIPS
(50) b. WAQC
(51) c. OPER
(52) d. LIMT
(53) e. FEDR
(54) f. VAEX
(55) g. REGS
(56) h. ENAC
(57) i. SRVY
(58) j. MSIS
(59) k. PWSI
(60) l. QUAL

4. Circle T (True) or F (False) for each of the following statements:

T F (61)	"SORT" is a processing option input form used to specify desired sequence of records for output.
T F (62)	"SEL2" is a processing option input form used to initiate a program.
T F (63)	"SEL1" is the processing option input form used to select records from MSIS files.
T F (64)	A program run cannot be initiated without using a "PROC" form.
T F (65)	The Laboratory input form is seldom used because the laboratory table is supplied by MSIS.
T F (66)	A State used the Code Value Table input form to enter its own acceptable data element values.
T F (67)	The Data Element Table input form is used to enter a detailed description of information about a data element.
T F (68)	A Record Creation and Maintenance input form is used to change PWS data.
T F (69)	Water Quality Transactions input forms are used either to add or to delete sample and analysis data.
T F (70)	The records on the Periodic Sample File and Sample Analysis File can be changed without deleting the entire record.

5. The Data Element Table input form cannot be used to identify which of the following:

(71) a. Which file used in
(72) b. New error code
(73) c. Name for field
(74) d. New catalogue number

6. Check the Water Quality Transaction input forms:

(75) a. ____Bacteriological or Turbidity Analysis
(76) b. ____Inorganic Chemical Contaminant
(77) c. ____Chemical or Radiological Analysis
(78) d. ____Sample Deletion Transactions
(79) e. ____Physical Contaminant Summary

7. Rate your current level of knowledge about MSIS: (Circle one)

(80)None (81)A little (82)Some (83)Quite a bit (84)A great deal

GLOSSARY

Terms are included in this glossary only if their meanings differ from those found in a standard English language dictionary.

Analysis:

The separation of any abstract entity or material into its constituant elements, such as chemical-intentionally produced decomposition or separation of materials into their ingredients to find their kind or quality.

Analysis Method:

The method or technique utilized to obtain analysis results.

Analytical Techniques:

The methods used to determine the components of a substance, especially raw water.

Batch Processing:

A procedure in which a number of transactions, for example on keypunched cards, are accumulated before being processed together.

Check Sampling:

The act of acquiring additional quantities of water for analysis over and above the regular samples due to the suspicion of violating maximum contaminant levels.

Code:

A system used for brevity of communication in which arbitrarily chosen words, letters, or symbols are assigned definite meanings.

Computer:

A machine which accepts input data, processes it, and gives output data.

Computer Program:

A sequence of computer-readable instructions used in conjunction with appropriate data to perform specified logical tasks.

Correction:

Additions, subtractions, or changes to a computer file.

Course:

All content taught in one individual MSIS training program volume. A course is subdivided into units.

Data:

Raw facts or statistics which alone have little or no meaning, but as a group allow some meaningful relationships to be drawn.

Data Element:

An identifiable item of information within a record. See the Data Element Dictionary for all data elements used in MSIS.

Data Processing:

The act of manipulating information to obtain a desired result, especially with the use of a computer.

Economical:

Of or pertaining to the financial reasons for granting variances and exemptions.

Enforcement:

The act of creating and maintaining compliance using coercive methods.

Enforcement Action:

An act intended to generate compliance.

Exemption:

Authorized waiver of an MCL requirement due to compelling factors, such as need for a PWS to design and build effective treatment facilities.

Field:

See data element.

File:

A collection of records systematically arranged to facilitate quick reference; may be stored on magnetic tape or magnetic disc.

Goal:

A general achievement toward which effort is directed.

Gross Alpha:

A group of substances which emit Alpha particle radiation.

Gross Beta:

A group of substances which emit Beta particle radiation.

Hardware:

The physical equipment in a data processing system (contrasted with software).

Information:

Data that has been processed to obtain specific results which increase knowledge of the recipient and is used as the basis for decision making.

Inorganic:

Of or pertaining to substances that are not hydrocarbons or their derivatives.

Input:

Information which is specially prepared for acceptance by computer programs. Usually written down on special forms, then put into machine-readable form by, for example, keypunching.

Integrity:

Presumed reliability of data.

Internal:

Data processing occurring within the computer automatically according to instructions from computer programs.

.Inventory:

A detailed, descriptive list, for example, of Public Water Systems.

Magnetic Disc:

A device which stores data on the magnetizable surfaces of one or more rotating discs, which look like a stack of phonograph records.

Magnetic tape:

A device which stores data on the magnetizable surface of a long strip of tape (the tape is typically 1 inch wide and 2400 feet long).

Maintain:

Actions taken to ensure up-to-date computer files.

Management Information System:

An organized method of maintaining facts pertinent to the governing of the operations of an organization.

Model State Information System:

(MSIS) a batch computer system designed to (1) maintain records on public water systems and the quality of the water they supply, and (2) prepare reports.

Monitor:

The acts of (1) a PWS observing and checking water quality or (2) a State observing and checking PWSs.

National Inventory File:

A computerized list of many public water systems in the United States; previously used to monitor water quality.

Objective:

A specific achievement that efforts are intended to attain.

Online Processing:

A procedure for inputting data computer whenever needed for immediate data processing, often by typewriter terminal.

Operator:

One who runs a public water system.

Organic:

Of or pertaining to substances that are hydrocarbons or their derivatives.

Output:

Any information passed from the computer.

Primacy:

Primary enforcement responsibility for carrying out the Safe Drinking Water Act of 1974.

Public Water System (PWS):

A set of components for the provision of piped water to persons for human consumption, if such facility has at least fifteen service connections or regularly serves at least twenty-five individuals 60 or more days per year.

Purge:

To remove from a computer those items no longer desired.

Raw Water:

Water at the source before any treatment.

Record:

A logical group of data elements.

Regulations:

Rules created by EPA within the guidelines established by the SDWA and having the same authority.

Report:

Information formatted by the computer in either human-readable form (such as a printed report) or machine-readable form (such as a magnetic tape).

Sample:

A portion of the whole to represent the whole, especially water.

Sanitary Survey:

An on-site review of the water source, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of such source for producing and distributing safe drinking water.

Selection Process:

The method used by MSIS for selecting information from a computer file for use in a report. Many different criteria can be used in the selection of the data.

Software:

The computer programs required for the computer to work.

Subsystem:

A subset of the MSIS computer system. There are nine MSIS subsystems.

System:

A method or methods of accomplishing a function or functions, especially with a computer.

Table:

A computer file of brief information usually set up in logical relationships to permit quick access, often on magnetic disc.

Turnaround Document:

A form containing computer-printed information which needs additional information written on it; called "turnaround" since it is both an output and an input.

Unit:

A subset of teaching material within a course.

Variance:

Authorized deviation from an applicable national drinking water regulation because characteristics of the raw water source cannot be corrected by available means.

List of Abbreviations

Abbreviation	Meaning
BIP	Background Informational Package
CVT	Code Value Table
DET	Data Element Table
DVF	Deviations File
EAF	Enforcement Actions File
EMT	Error Message Table
ENAC	Enforcement Actions Subsystem
EPA	Environmental Protection Agency
FEDR	Federal Reporting Subsystem
LBT	Laboratory Table
MCL	Maximum Contaminant Level
MSIS	Model State Information System; also MSIS Standard Processing Subsystem
NIF	National Inventory File
NIPDWR	National Interim Primary Drinking Water Regulations
OMF	Operator and Mailing File
OPER	Operator and Mailing Subsystem
OWS	Office of Water Supply
PSF	Periodic Sample and Analysis File
PWF	Public Water System File
PWS	Public Water System
PWSI	Public Water System Inventory Subsystem
PWT	Public Water System Table
REGS	Regulations Subsystem

RGF	Regulations File
SAF	Sample and Analysis File
SDWA	Safe Drinking Water Act
SHF	MSIS Standard History File
SRVY	Sanitary Survey Subsystem
VAEX	Variances and Exemptions Subsystem
VEF	Variances and Exemptions File
VIF	Violations File
WAQC	Water Quality Compliance Subsystem

EXTRACTS FROM
MSIS DOCUMENTS

IX. Summary of Data Requested to be Reported to EPA

If any of the following data is missing or incorrect upon editing during the Data Entry and Update program of any subsystem, a Standard Warning Report will be printed noting the error.

A. Public Water Supply Inventory Data

Data Element COBOL Programming Name	Data Element Catalogue No.
PWF-ID	145
PWF-PLANT-OWNER-NAME	146
PWF-PLANT-STREET	147
PWF-PLANT-CITY	148
PWF-PLANT-STATE	149
PWF-PLANT-ZIP-CODE	150
PWF-PLANT-CONSECUTIVE-NUM-PWS	180
PWF-PLANT-INTERSTATE-CARRIER	181
PWF-PLANT-POPULATION-SERVED	183
PWF-PLANT-SERVICES-NUMBER	184
PWF-PLANT-AVERAGE-PRODUCTION	186
PWF-PLANT-DESIGN-CAPACITY	187
PWF-PLANT-ACTIVITY	194
PWF-PLANT-DEACTIVATION-DATE	195
PWF-PLANT-DEACTIVATION-REASON	196
PWF-STATE-POSTAL-CODE	198
PWF-STATE-REGULATED-BY	199
PWF-STATE-CHLORINE	210
PWF-STATE-TURBIDITY-UNITS	212
PWF-STATE-AIR-TEMPERATURE	217
PWF-STATE-RADIOACTIVE-FLAG	219
PWF-OWNER-TYPE	237
PWF-PLANT-SOURCE-NAME	243
PWF-PLANT-SOURCE-CODE	244
PWF-PLANT-SELLER-ID	250
PWF-PLANT-CONSEC-INDICATOR	701

B. Violation Data

Data Element COBOL Programming Name	Data Element Catalogue No.
VIF-PWS-ID	326
VIF-CONTAMINANT-ID	331
VIF-ANALYSIS-RESULT	339
VIF-VIOLATION-TYPE	343
VIF-VIOLATION-DATE	344
VIF-MCL-VIOLATED	345

C. Variance and Exemption Data

Data Element COBOL Programming Name	Data Ellement Catalogue No.
VEF-PWS-ID	457
VEF-VE-TYPE	458
VEF-CONTAMINANT-ID	462
VEF-MODIFIED-MCL	463

D. Enforcement Action Data

Data Element COBOL Programming Name	Data Element Catalogue No.
EAF-CASE-ID	430
EAF-ACTION-DATE	433
EAF-CLOSE-OPEN-INDIC	434
EAF-PLAINTIFF-TYPE	435
EAF-DEFENDANT-TYPE	437
EAF-PWS-ID	443
EAF-PWS-STATE	444
EAF-LEGAL-STATUS	449
EAF-LAST-UPDATE-DATE	450

Input Forms

Subsystem	Processing Options															
	PROC. Prog.	No.	SORT Prog.	No.	SEL1 Prog.	No.	SEL2 Prog.	No.	Table Creation Prog.	No.	Record Creation Prog.	No.	Water Quality Prog.	No.	Scheduling Prog.	No.
PSWI	010	111	030 - 080	100	020 & 080	107	020 & 080	108			010	114				
	020 - 050	113														
	060	110														
	070	106					RESTART									
	080	101					125									
	090	103														
	120 - 130	101														
WAQC	010 & 020	103	011	104	100 & 125	116	100 & 125	117	210	101	120	119	010	106	130	124
	011 & 125	111	040 - 113	113						102		120		107		
	025	121												108		
	040	112												105		
	100	115										020		110		
	120	118														
	130	114														
	210	100														
	220	113														
REGS	010	199							010	101						
	020	109								102						
										103						
										104						
										105						
										106						
										107						
										108						
VAEX	010	102	040	103	040	105	040	106			010	100				
												101				
												107				
SRVY	010	100	010	101												
ENAC	010	100	020	106	020	107	020	108			010	101				
	020	105										102				
												103				
												104				
OPER	010	101	020	103	020	104	020	105			010	100				
	020	102														
MSIS	030 & 040	101	040	108	040	106	040	107	030	102						
	050	100								103						
										104						
FEDR	010	100														
TOTALS	32	26	22	7	8	6	8	6	3	13	5	11	2	5	1	1

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RGF Report Module
SouthWestern Ohio Regional Computer Center

EXHIBIT REGS.301

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                                   MODEL STATE INFORMATION SYSTEM
REGS020                                 REGULATIONS SUBSYSTEM

DATE XX/XX/XX                    REGULATIONS REPORT - CHEMICAL CONTAMINANTS                          PAGE 88889

   CONTAMINANT ID         REGULATION/LEVEL           CHEMICAL NAME         REASON FOR MONITORING

     9999                       XX                   XXXXXXXXXXX                    X

     MCL UNITS        M.L         MCL DECIMALS          REASONABLE BOUNDS               NUMBER OF CHECK SAMPLES
                                                LOWER DECIMALS  UPPER DECIMALS      REQUIRED IF REGULAB
                                                                                     SAMPLE VIOLATES MCL

      XXXXXX        888889             9        88889     9     88889     9                  9

     SEASONAL          SPECIAL        MAXIMUM TIME TO INITIATE
     SAMPLING        COMPUTATION      SECOND SAMPLE ANALYSIS IF         PERIOD WITHIN WHICH CHECK
  (ORGANIC ONLY)                    REGULAR SAMPLF IS IN VIOLATION        SAMPLES MUST BE MADE
                                         (NITRATE ONLY)

        X                X                    88                                89

      PWS           EFFECTIVE      MONITORING REQUIREMENTS        NORMAL               IF MCL IS VIOLATED
      TYPE            DATE          SOURCE    YEARS TO           SAMPLING        MINIMUM         MINIMUM NUMBER
    ___________     _________        TYPE   FIRST SAMPLE        FREQUENCY       SAMPLING        OF SUCCESSIVE
                                                                                FREQUENCY      NEGATIVE SAMPLES

    COMMUNITY        XX/XX/XX       GROUND       9                 8889            8889              89

                                    SURFACE      9                 8889            8889              89


    NON-COMMUNITY    XX/XX/XX       GROUND       9                 8889            8889              89

                                    SURFACE      9                 8889            8889              89
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  RGF Report Module
              SouthWestern Ohio Regional Computer Center
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                                             MODEL STATI INFORMATION SYSTEM
   REGS020                                     REGULATIONS SUBSYSTEM

   DATE XX/XX/XX                        REGULATIONS REPOIT - TURBIDITY CONTAMINANT                PAGE ZZZZ9

      CONTAMINANT ID                 REGULATION/LEVEL                      CONTAMINANT NAME

         0100                              XX                                 TURBIDITY

          MCL FOR                          MCL FOR                             NUMBER OF
      MONTHLY AVERAGE                CONSECUTIVE SAMPLES                 CONSECUTIVE SAMPLES

            Z9                               Z9                                  Z9

         EFFECTIVE                        APPLY TO                          INCLUDE REPEAT
           DATE                          ALL SOURCES                     SAMPLES IN AVERAGE

         XX/XX/XX                            X                                   X

        ____FREQUENCY  OF  MONITORING______________                     MINIMUM RESAMPLING PERIOD
                                                                            IF MCL EXCEEDED
        COMMUNITY PWS:  ZZ9   NON-COMMUNITY PWS:  ZZ9
                                                                                 Z9
          REGS020                         1 of 1
                                          9/23/76
   RGF Report Module
             SouthWestern Ohio Regional Computer Center
 EXHIBIT  REGS.303


                                               MODEL STATE INFORMATION SYSTEM
  REGS020                                         REGULATIONS SUBSYSTEM

  DATE XX/XX/XX              REGULATIONS REPORT - POPULATION TABLE FOR BACTERIOLOGICAL SAMPLING          PAGE ZZZZ9

     CONTAMINANT ID                       REGULATION/LEVEL                    TABLE ID

        3000                                 XX                                  1

               POPULATION LOWER LIMIT    POPULATION UPPER LIMIT    MINIMUM SAMPLES PER MONTH

                    ZZZZZZZZ9                 ZZZZZZZZ9                      ZZ9
                    ZZZZZZZZ9                 ZZZZZZZZ9                      ZZ9
                    ZZZZZZZZ9                 ZZZZZZZZ9                      ZZ9
                        ↓                         ↓                           ↓
             REGS020                          1 of 1
                                              9/23/76
   RGF Report Module
             SouthWestern Ohio Regional Computer Center
  EXHIBIT  REGS.304


   REGS020                                        MODEL STATE INFORMATION SYSTEM
                                                      REGULATIONS SUBSYSTEM
   DATE XX/XX/XX                            REGULATIONS REPORT - BACTERIOLOGICAL CONTAMINANT                   PAGE ZZZZ9

     CONTAMINANT ID           REGULATION/LEVEL           CONTAMINANT NAME           EFFECTIVE DATE

        3010                        XX                       COLIFORM                   XX/XX/XX

        ANALYSIS                  SINGLE SAMPLE      MONTHLY      PERCENT OF    MINIMUM REQUIRED   MCL WHEN
         METHOD         UNIT           MCL             MCL         SAMPLES        SAMPLES TO        PERCENT
                                                                                  USE PERCENT       IS USED
       MEMBRANE       COLIFORM         Z9              Z9            Z9              Z9               Z9
       FILTER
       FERMENTATION   POSITIVE         Z9              Z9 (%)        Z9              Z9               Z9
       TUBE - 10ML.   PORTIONS
       FERMENTATION   POSITIVE         Z9              Z9 (%)        Z9              Z9               Z9
       TUBE - 100ML.  PORTIONS

       REQUIREMENTS FOR WAIVER OF ONE MONTH SAMPLING:    MAXIMUM REQUIRED SAMPLES      SAMPLING PERIOD
                                                                    9                         9
       CHECK SAMPLING REQUIREMENTS IF SINGLE SAMPLE MCL IS VIOLATED:

         MINIMUM NUMBER OF CONSECUTIVE     MINIMUM NUMBER OF CONSECUTIVE     MINIMUM NUMBER OF CONSECUTIVE
             DAILY CHECK SAMPLES                NEGATIVE PORTIONS                  COLIFORM BACTERIA

                     9                                  9                                 Z9
       CHLORINE RESIDUAL METHOD:

         NUMBER OF SAMPLES IN LIEU      MAXIMUM PERCENT OF      MINIMUM CHLORINE          MAXIMUM TIME TO
          OF ONE REGULAR SAMPLE          REGULAR SAMPLES             LEVEL             RETEST CHLORINE LEVEL

                  Z9                           Z9                     9.9                       Z9
       NON-COMMUNITY PWS MONITORING REQUIREMENTS:

              EFFECTIVE          SEASONAL          SAMPLING         NUMBER OF SAMPLES
                DATE             SAMPLING           PERIOD             PER PERIOD

              XX/XX/XX              X                 X                    Z9
          REGS020                             1 of 1
                                              9/23/76
NGF Report Module
                  SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT  REGS.305


REGS020                                             MODEL STATE INFORMATION SYSTEM
                                                       REGULATIONS SUBSYSTEM
DATE XX/XX/XX                                   REGULATIONS REPORT - FLUORIDE MCL TABLE                      PAGE ZZZZ9

   CONTAMINANT ID                          REGULATION/LEVEL                          TABLE ID

      1025                                        XX                                     2

                    ___________TEMPERATURE  RANGES  AND  CORRESPONDING  MCL_____________
                     FAHRENHEIT                 CELSIUS
                    LOWER     UPPER          LOWER     UPPER                MCL
                    Z9.9      Z9.9           Z9.9      Z9.9              ZZZZ9.9
                    Z9.9      Z9.9           Z9.9      Z9.9              ZZZZ9.9
                    Z9.9      Z9.9           Z9.9      Z9.9              ZZZZ9.9
                     ↓         ↓              ↓         ↓                  ↓

                                REASONABLE BOUNDS

                    Z9.9      Z9.9           Z9.9      Z9.9
```

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              REGS020                          1 of 1
                                               9/23/76
  RGF Report Module
                    SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT  REGS.306

                                                  MODEL STATE INFORMATION SYSTEM
   REGS020                                            REGULATIONS SUBSYSTEM

   DATE XX/XX/XX                              REGULATIONS REPORT - MAJOR BETA EMITTERS TABLE                 PAGE ZZZZ

                     REGULATION/LEVEL              TABLE ID          EFFECTIVE DATE

                           XX                          3                 XX/XX/XX

                                                                                                  NUCLEAR
                                                       ANNUAL CONCENTRATION        DETECTION    POWER PLANT
     CONTAMINANT ID        CONTAMINANT NAME           EQUIVALENT TO MCL DOSE         LIMIT        CODE(S)

          4199             XXXXXXXXXXXXXXX                    ZZZZ9.9                ZZZ9        Z Z Z Z Z
          4199             XXXXXXXXXXXXXXX                    ZZZZ9.9                ZZZ9        Z Z Z Z Z
          4199             XXXXXXXXXXXXXXX                    ZZZZ9.9                ZZZ9        Z Z Z Z Z
          REG020                  1 of 1
                                  9/23/76
RGP Report Module
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT  REGS.307


                                        MODEL STATE INFORMATION SYSTEM
REGS020                                    REGULATIONS SUBSYSTEM

DATE XX/XX/XX                      REGULATIONS REPORT - GROSS ALPHA CONTAMINANT                      PAGE ZZZZ9

   CONTAMINANT ID            REGULATION/LEVEL            CONTAMINANT NAME              EFFECTIVE DATE

      4000                         XX                      GROSS ALPHA                     XX/XX/XX

       MCL AND SCREENING LEVELS:
                                               MAXIMUM GROSS ALPHA                  MAXIMUM RADIUM-226
                                                 SCREENING LEVEL                     SCREENING LEVEL
         GROSS       COMBINED                WITHOUT          WITH                 FOR         FOR ANNUAL
         ALPHA        RADIUM               RADIUM-228      RADIUM-228           RADIUM-228     MONITORING
          MCL          MCL

         Z9.9         Z9.9                    Z9.9            Z9.9                 Z9.9           Z9.9


       SAMPLING AND ANALYSIS REQUIREMENTS;
                                                              INITIAL                   FRACTION OF MCL
         NUMBER OF SAMPLES          MINIMUM NORMAL        MONITORING PERIOD          AT WHICH TO SUBSTITUTE
             PER YEAR            MONITORING FREQUENCY   FOR NEW WATER SOURCE         SINGLE ANNUAL SAMPLE

                9                          9                     Z9                           .99

         MINIMUM MONITORING        ANNUAL COMPOSITE OR    THESE REGULATIONS APPLY TO
          FREQUENCY IF PWS         FOUR SAMPLE AVERAGE      COMMUNITY, NON-COMMUNITY
          IS IN VIOLATION              REQUIRED                      OR BOTH

                Z9                        X                             X
```

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        REGS020                      1 of 1
                                     9/23/76
  RGF Report Module
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT  REGS.308


                                         MODEL STATE INFORMATION SYSTEM
 REGS020                                      REGULATIONS SUBSYSTEM

 DATE XX/XX/XX                         REGULATIONS REPORT - GROSS BETA CONTAMINANT                              PAGE ZZZZ9

    CONTAMINANT ID               REGULATION/LEVEL               CONTAMINANT NAME                EFFECTIVE DATE

       4100                            XX                           GROSS BETA                    XX/XX/XX

      MCL AND SCREENING LEVELS:
                                                                      MAXIMUM  GROSS  BETA  SCREENING  LEVELS
       MAN-MADE                                           FOR MAJOR BETA       FOR MAJOR BETA        FOR STRONTIUM-89 AND
     RADIONUCLIDE       TRITIUM      STRONTIUM-90         EMITTERS - NO      EMITTERS - WATERS      CESIUM-134 - WATERS
      ANNUAL MCL       SCREENING      SCREENING          NUCLEAR FACILITY    CONTAMINATED BY A       CONTAMINATED BY A
       DOSAGE            LEVEL          LEVEL             CONTAMINATION       NUCLEAR FACILITY        NUCLEAR FACILITY

        9.9              ZZZZ9          Z9.9                  Z9.9                 Z9.9                    Z9.9

      SAMPLING AND ANALYSIS REQUIREMENTS;

       THESE REGULATIONS APPLY TO         REQUIRED MONITORING          COMPOSITE OR            MINIMUM POPULATION
       COMMUNITY, NON-COMMUNITY        OF GROUND WATER SOURCES       SAMPLE AVERAGE               FOR REQUIRED
              OR BOTH                                                   REQUIRED              ANNUAL MONITORING

                 X                              X                          X                       ZZZZZ9

         NO NUCLEAR FACILITY CONTAMINATION:                         MINIMUM MONITORING
                                                                     FREQUENCY IF PWS
            NUMBER OF SAMPLES            MINIMUM NORMAL               IS IN VIOLATION
                PER YEAR             MONITORING FREQUENCY
                                                                          Z9
                   9                          9

         WATERS CONTAMINATED BY A NUCLEAR FACILITY:
                                                                    MINIMUM MONITORING          IODINE-131 CONSECUTIVE
            NUMBER OF SAMPLES            MINIMUM NORMAL              FREQUENCY IF PWS          DAILY SAMPLES REQUIRED
                PER YEAR              MONITORING FREQUENCY            IS IN VIOLATION              PER QUARTER
                   STRONTIUM-90                 STRONTIUM-90
         IODINE-131   AND TRITIUM     IODINE-131   AND TRITIUM                                        Z9

            Z9           Z9              Z9            Z9                 Z9
```

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                   PWSI030                          1 of 1
                                                    11/16/76
  PRODUCE CONDENSED REPORT
               SouthWestern Ohio Regional Computer Center
EXHIBIT  PWSI.300
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                                                   MODEL STATE INFORMATION SYSTEM
PWSI030                                       PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

DATE XX/XX/XX                                             CONDENSED REPORT                                             PAGE ZZZZ9

PWS-ID  REGION DISTRICT TYPE     MAILING NAME/ADDRESS            PLANT/OWNER ADDRESS          PLANT LOCATION     OWNER POPULATION
                                                                                                                  TYPE   SERVED

XXXXXXX   XX     XX      X   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX CITY: XXXXXXXXXXXXXX   X   XXXXXXXXX
                             XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX COUNTY: XX
                             XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                             XX XXXXX                        XX XXXXX
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              PWS1050                          1 OF 1
                                               11/18/76
   STATE DISCRETIONARY DATA REPORT MODULE
             SOUTHWESTERN OHIO REGIONAL COMPUTEͬ CENTER
  EXHIBIT PWS1.301


                                                     MODEL STATE INFORMATION SYSTEM
   PWS1050                                       PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

   DATE XX/XX/XX                            PUBLIC WATER SYSTEMS - STATE DISCRETIONARY DATA                       PAGE ZZZZ9

   REGN DIST    ID              NAME        ------------------------B A C T E R I O L O G I C A L-----------------   ---TURBIDITY---
                                                                                   MIN NO  NCOM  MCL HALT  \
    XX   XX  XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  BACTI MONTHLY  NO OF    SEASON    DAILY  SAMPLE  CHECK  CHLORINE       TURBIDITY
                                                     FLG  MONITOR SAMPLES START END CHECKS  FREQ   SAMPLE  SAMPLES       FLAG   UNITS

                                                      X      X      XXX   XX/XX XX/XX X     XXX      X       XX            X      X.X

   ----------------CHEMICALS---------------    ------------------------------RADIOACTIVE-------------------------------------
        FOLLOW
     UP MONITOR                 INORGANIC
   CONTAMIN SAMPLE    ORGANIC     AIR  NITRATE    RADIOACTIVE  BETA FREQ  NUCLEAR    MONITOR      MONITOR     NUM SAMPLES  GROUND WATER
      ID     FREQ   BEGIN  END   TEMP   FREQ      FLG MONITOR    MONTHS     FAC    GROSS ALPHA  RADIUM MTHS    PER  YR       MONITOR

     XXXX    XXX   XX/XX XX/XX XX.X   XXXX         X     X        XX       X  X        XX           XX            X            X
     XXXX    XXX
     XXXX    XXX
     XXXX    XXX

   LAB DATA:         ID        CAPTIVE      TYPE
                                                                                FACILITY        CONTAMINANT
                    XXXXX         X           X                                CONTAMIN ID       FREQUENCY
                    XXXXX         X           X
                    XXXXX         X           X                                   XXXX              XX
                    XXXXX         X           X                                   XXXX              XX
                    XXXXX         X           X                                   XXXX              XX
                                                                                  XXXX              XX
   VARIANCE OR  CONTAMINANT  MODIFIED  ALT MONITOR                                XXXX              XX
    EXEMPTION:      ID         MCL        FREQ                                    XXXX              XX
                                                                                  XXXX              XX
                    XXXXX     XXXXXX      XXX                                     XXXX              XX
                    XXXXX     XXXXXX      XXX                                     XXXX              XX
                    XXXXX     XXXXXX      XXX                                     XXXX              XX
                    XXXXX     XXXXXX      XXX
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PWS1040 1 of 1
11/18/76

Production Data Report Module
SouthWestern Ohio Regional Computer Center

EXHIBIT PWSI.302

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                                                    MODEL STATE INFORMATION SYSTEM
PWS1040                                        PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

DATE XX/XX/XX                                        PRODUCTION AND CAPACITY DATA                                        PAGE ZZZZ9

PWS-ID REG/                                           POPULATION SERVICES METERS  AVERAGE  DESIGN   EMERGENCY   STORAGE    MAXIMUM
        DIST TYPE UNITS          PWS NAME               SERVED   NUMBER  NUMBER   PRODUCT CAPACITY    POWER     CAPACITY  PRODUCTION

XXXXXXX XX/XX  X    X  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX
XXXXXXX XX/XX  X    X  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX
XXXXXXX XX/XX  X    X  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX
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            PWS1060                   1 OF 1

      PRODUCE COMPREHENSIVE REPORT
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
      EXHIBIT PWSI.303


                                            MODEL STATE INFORMATION SYSTEM
PWS1060                                   PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

DATE XX/XX/XX                                  COMPREHENSIVE REPORT                                        PAGE ZZZZ9

PWS-ID: XXXXXXX  NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          PHONE: (XXX) XXX-XXXX       INDIAN RESERVATION CODE: XXX
        PLANT ADDRESS: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          PLANT AREA LOCATION:        COMPLIANCE CYCLE: XX
                       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX     CITY: XXXXXXXXXXXXXXX   POSTAL CODE: XX
         MAILING NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              COUNTY: XXX             PLANT TYPE: X    OWNER TYPE: X
      MAILING ADDRESS: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX     REGION: XX          DISTRICT: XX     PLANT BEGIN DATE: XX/XX
PLANT   RESIDENTIAL: X  COMPANY TOWN: X  RECREATION   : X  MOBILE HOMES   : X  INSTITUTION   : X  SCHOOL    X  OTHER AREA: X
 SERVICE  MOTEL     : X  RESTAURANT   : X  SERV STATION: X  CAMPGROUND     : X  PICNIC AREA   : X  LODGE     X
  AREA:   MARINA    : X  SKI RESORT   : X  BATHING     : X  VISITOR CENTER: X  HWY REST AREA: X  AIRPORT: X
                                                                                 CONSECUTIVE INDICATOR: X
  POPULATION SERVED: XXXXXXXXX   NUMBER OF SERVICES: XXXXXXX   NUMBER OF METERS: XXXXXXX   NUMBER OF CONSECUTIVE PWS: XXXXXXX
  DESIGN CAPACITY:  XXXXXXXXXX   EMERGENCY POWER: XXXXXXXXXX   STORAGE CAPACITY:XXXXXXXXXX MAXIMUM PRODUCTION: XXXXXXXXXX
  INTERSTATE CARRIER:     X      AVERAGE PRODUCTION:XXXXXXXXXX LAST SURVEY DATE: XX/XX/XX  LAST UPDATE DATE:   XX/XX/XX
  DEACTIVATION REASON:    X      DEACTIVATION DATE: XX/XX/XX   MANUAL FILE: XXXXXXXXXXXX   REGULATE BY: X     ACTIVITY CODE: X

STATE DISCRETIONARY DATA:
  BACTERIOLOGICAL FLG: X     MINIMUM NUMBER DAILY CHECKS: X    NON-COMMUNITY SAMPLING FREQ: XXX               SEASON
  MONTHLY MONITORING:  X     SAMPLES PER QUARTER: XXX          MCL HALT CHECK SAMPLE: X             START: XX/XX    END: XX/XX
  CHLORINE : XX              TURBIDITY FLAG: X                 TURBIDITY UNITS: X.X

FOLLOW UP:               CONTAMINANT ID:     XXXX      XXXX      XXXX      XXXX
                         SAMPLING FREQ :     XXX       XXX       XXX       XXX
  ORGANIC CHEMICALS:                     ORGANIC                       INORGANIC CHEMICALS:
                         BEGIN PERIOD: XX/XX END PERIOD: XX/XX                    AIR TEMPERATURE: XX.X     NITRATE FREQUENCY: XXXX
RADIOACTIVE: FLAG: X  MONITORING: X  BETA FREQUENCY MONTHS: XX  MONITOR GROSS ALPHA: XX  MONITOR RADIUM MONTHS: XX
                 GROUND WATER MONITOR: X  NO SAMPLES PER YEAR: X    NUCLEAR FACILITY: X      NUCLEAR FACILITY TYPES:  X  X
              FACILITY CONTAMINANT ID: XXXX    XXXX    XXXX    XXXX    XXXX    XXXX    XXXX    XXXX    XXXX    XXXX
              SAMPLING FREQUENCY:        XX      XX      XX      XX      XX      XX      XX      XX      XX      XX
OPERATING REPORT:    REPORT REQUIRED: X  LAST REPORT DATE: XX/XX  GENERIC METRIC SYSTEM: X
  STATE RESERVED:

LAB DATA:                                                                   VARIANCE OR EXEMPTION:
              LAB ID:       XXXXX XXXXX XXXXX XXXXX XXXXX                         CONTAMINANT ID  :    XXXX       XXXX        XXXX       XXXX
              CAPTIVE FLG:    X     X     X     X     X                           MODIFIED MCL    : XXXXXXXXXX XXXXXXXXX  XXXXXXXXXX XXXXXXXXXX
PLANT SOURCES NUMBER: XX                                                          ALT MONITOR FREQ:    XXX        XXX         XXX        XXX
SOURCE INFORMATION:                                                                                                        TREATMENTS
                                                                                                           A P C S F C S T I A F D O P
                                                                                                           E R O E I O O A R M L I T E
                                                                                                           R E A D L P F S O M U S H S
                                     SOURCE      NUMBER                     BASIN                       SELLER     A C G I T R T T N O O I E E
     SOURCE NAME                    CODE       OF WELLS    AVAILABILITY   NUMBER    LATITUDE    LONGITUDE     ID      T H L M R O E E R N R N R R

  XXXXXXXXXXXXXXX                    X           XX              X          XXXX    XXX.XX.XX   XXX.XX.XX   XXXXXXX    X X X X X X X X X X X X X X
  XXXXXXXXXXXXXXX                    X           XX              X          XXXX    XXX.XX.XX   XXX.XX.XX   XXXXXXX    X X X X X X X X X X X X X X
  XXXXXXXXXXXXXXX                    X           XX              X          XXXX    XXX.XX.XX   XXX.XX.XX   XXXXXXX    X X X X X X X X X X X X X X
```

```
        PWS1120                          1 OF 1
                                         11/16/76
CONVERT NATIONAL INVENTORY MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT PWS1.305


 PWS1120                                       MODEL STATE INFORMATION SYSTEM
                                             PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM
 DATE XX/XX/XX
                                              NATIONAL PUBLIC WATER SUBSYSTEM
                                                     CONVERTED DATA REPORT                              PAGE ZZZZ9
 PWS PLANT-----
          NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  PHONE: XXX XXXXXXX  ------PLANT------
      LOCATION: XXXXXXXXXXXXXXXXXXXXXXXXXXXXX                                         -----PLANT------
                XXXXXXXXXXXXXXXXXXXXXXXXXXXXX                     COUNTY CODE       : XXX        DESIGN CAPACITY : XXXXXXXXX
                XX  XXXXX                                         POPULATION SERVED: XXXXXXXXX  EMERGENCY POWER : XXXXXXXXX
                                                                  NUMBER SERVICES   : XXXXXXX    STORAGE CAPACITY: XXXXXXXXX
                                                                  NUMBER METERS     : XXXXXXX    AVERAGE CAPACITY: XXXXXXXXX
                                                                  BEGIN DATE        : XX/XX      MAX. PRODUCTION : XXXXXXXXX
SERVICE AREA CHARACTERISTICS:  COMMUNITY: X  COMPANY TOWN: X  RECREATION      : X  MOBILE HOME PARK: X  INSTITUTION      : X
                SCHOOL : X     MOTEL    : X  RESTAURANT  : X  SERVICE STATION: X  CAMPGROUND      : X  PICNIC AREA      : X
                LODGE  : X     MARINA   : X  SKI RESORT  : X  BATHING         : X  VISITOR CENTER  : X  HIGHWAY REST AREA: X
                OTHER  : X
PWS PLANT:
     SOURCE NAME     LATITUDE LONGITUDE  SOURCE                                              LAST UPDATE DATE: Z9/Z9/Z9
                                          CODE       TREATMENTS
                                                                          SOURCES
1  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X                        1 2 3 4 5 6 7 8 9 10 11 12
2  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     AERATION         : X X X X X X X X X  X  X  X
3  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     PRECHLORINATION: X X X X X X X X X  X  X  X
4  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     COAGULATION      : X X X X X X X X X  X  X  X
5  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     SEDIMENTATION    : X X X X X X X X X  X  X  X
6  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     FILTRATION       : X X X X X X X X X  X  X  X
7  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     SOFTENING        : X X X X X X X X X  X  X  X
8  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     TASTE-ODOR       : X X X X X X X X X  X  X  X
9  XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     IRON-REMOVAL     : X X X X X X X X X  X  X  X
10 XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     AMMONIATION      : X X X X X X X X X  X  X  X
11 XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     FLOURIDE-ADJUST: X X X X X X X X X  X  X  X
12 XXXXXXXXXXXXXXX  XXXXXXX  XXXXXXX      X     DISINFECTION     : X X X X X X X X X  X  X  X
```

```
         PWS1090                         1 OF 1
                                         11/18/77
   PHF PURGE MODULE
         SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
  EXHIBIT PWS1.306
```

```
PWS1090                                            MODEL STATE INFORMATION SYSTEM
                                                PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

DATE XX/XX/XX                                      PUBLIC HISTORY FILE PURGE REPORT                                   PAGE ZZZZ9
                                                        PURGE DATE: XX/XX/XX

                                                                 DATA
                                          CURRENT REGION   LAST  ELEMENT
PWS-ID            PWS NAME                 UPDATE     DIST UPDATE CTLG.NO           NEW VALUE                          OLD VALUE

XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX/XX/XX XX  XX XX/XX/XX   XX>  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

PWSI070 1 of 1
1/12/77

PHF Maintenance Module
SouthWestern Ohio Regional Computer Center

EXHIBIT PWSI.307

```
                                     MODEL STATE INFORMATION SYSTEM
PWSI070                            PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

                                   PUBLIC WATER SYSTEM INVENTORY UPDATE REPORT                       PAGE ZZZZ9
DATE XX/XX/XX                                OPTION: XXXXXXXXXXXXXXX ①

                                                                DATA
                                  CURRENT REGION    LAST     ELEMENT
PWS-ID          PWS NAME           UPDATE    DIST   DATE     CTLG.NO          NEW VALUE                    OLD VALUE

XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX/XX/XX XX  XX XX/XX/XX   XXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

① X's will be replaced by one of the following:

a. CURRENT UPDATES
b. ALL UPDATES

```
        PWS1010                      1 OF 1
                                     3/2/77
   PWF DATA ENTRY AND UPDATE MODULE
        SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
   EXHIBIT PWS1.309

PWS1010                                    MODEL STATE INFORMATION SYSTEM
                                       PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM
DATE XX/XX/XX                                PWF UPDATE STATISTICS REPORT                             PAGE ZZZZ9

                                                                                 % RELATIVE TO THE
                                                                   -- TOTAL --     ORIGINAL FILE
              1. NUMBER OF RECORDS ORIGINALLY ON THE FILE          ZZZ,ZZZ,ZZ9
              2. NUMBER OF ACCEPTABLE DATA ENTRY TRANSACTIONS      ZZZ,ZZZ,ZZ9
              3. NUMBER OF STANDARD ERROR RECORDS CREATED          ZZZ,ZZZ,ZZ9
              4. NUMBER OF RECORDS MODIFIED ON THE FILE            ZZZ,ZZZ,ZZ9         ZZ9 %
              5. NUMBER OF NEW RECORDS ADDED TO THE FILE           ZZZ,ZZZ,ZZ9         ZZ9 %
              6. NUMBER OF DEACTIVATED RECORDS ON THE FILE         ZZZ,ZZZ,ZZ9         ZZ9 %
              7. NUMBER OF RECORDS DEACTIVATED THIS RUN            ZZZ,ZZZ,ZZ9
              8. NUMBER OF RECORDS DELETED THIS RUN                ZZZ,ZZZ,ZZ9         ZZ9 %
              9. NUMBER OF RECORDS NOW ON THE FILE                 ZZZ,ZZZ,ZZ9         ZZ9 %
             10. NUMBER OF NEW PWS RECORDS                         ZZZ,ZZZ,ZZ9
             11. NUMBER OF INCOMPLETE PWS RECORDS                  ZZZ,ZZZ,ZZ9
             12. NUMBER OF PWS STATUS RECORDS                      ZZZ,ZZZ,ZZ9
             13. NUMBER OF UNSUCCESSFUL UPDATE RECORDS             ZZZ,ZZZ,ZZ9
```

```
              PWS1080                           1 OF 1
                                                12/14/76
PHF SELECTION MODULE
           SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT PWSI.311


                                                   MODEL STATE INFORMATION SYSTEM
PWS1080                                       PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

DATE XX/XX/XX                                   PUBLIC HISTORY FILE SELECTION REPORT                                      PAGE 22229

                                                                  DATA
                                       CURRENT REGION     LAST   ELEMENT
PWS-ID             PWS NAME             UPDATE      DIST UPDAT"  CTLG.NO          NEW VALUE                       OLD VALUE

XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX/XX/XX XX  XX XX/XX/XX   XXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX/XX/XX XX  XX XX/XX/XX   XXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

PWSI090 1 of 1
11/18/76

PHF Purge Module
SouthWestern Ohio Regional Computer Center
EXHIBIT PWSI.312

```
                                   MODEL STATE INFORMATION SYSTEM
PWSI090                          PUBLIC WATER SYSTEM INVENTORY SUBSYSTEM

DATE XX/XX/XX                    PUBLIC HISTORY FILE PURGE STATISTICS REPORT                          PAGE ZZZZ9

                                                                               % RELATIVE TO THE
                                                                 -- TOTAL --    ORIGINAL FILE

              1. NUMBER OF RECORDS ORIGINALLY ON THE FILE        ZZZ,ZZZ,ZZ9

              2. NUMBER OF RECORDS PURGED THIS RUN               ZZZ,ZZZ,ZZ9        ZZ9%

              3. NUMBER OF RECORDS NOW ON THE FILE               ZZZ,ZZZ,ZZ9        ZZ9%
```

```
            WAQC210                              1 OF 1
                                                 10/28/76
   LBT CREATION MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
                     EXHIBIT WAQC.300


WAQC210                                       MODEL STATE INFORMATION SYSTEM
                                              WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX
                                                 LABORATORY TABLE REPORT                                          PAGE ZZZZ9

    LAB ID          LABORATORY NAME            CONTAMINANT              AUTHORIZED ANALYSIS METHOD CODES
                                                  GROUP     _______________________________________________
    XXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
         OWNER TYPE      EXPIRATION DATE            0
                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
             X               XX/XX/XX

                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
                                                    1
                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX

                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
                                                    2
                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX

                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
                                                    3
                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX

                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
                                                    4
                                                            XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX
            WAQC010                          1 OF 1
                                             12/17/76
PSF DATA ENTRY AND UPDATE MODULE
             SouthWestern Ohio Regional Computer Center
                  EXHIBIT WAQC.301


WAQC010                                         MODEL STATE INFORMATION SYSTEM
                                              WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX
                                              UPDATE REPORT - PERIODIC SAMPLE FILE
                                                                                                  PAGE ZZZZ9
 ACTION
  TAKEN   --------RECORD KEY-----------------   -----------------------REMAINDER OF THE RECORD------------------------
  ADDED   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 DELETED  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

WAQC011 1 of 1
12/17/76

PSF Transaction Report
SouthWestern Ohio Regional Computer Center
EXHIBIT WAQC.302

```
                                   MODEL STATE INFORMATION SYSTEM
WAQC011                           WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX           TRANSACTION SORT SEQUENCE REPORT - PERIODIC SAMPLE FILE             PAGE 00009

                                   MNEMONIC NAME    SORT MODE

                               1.  XXXXXXXXXX           X

                               2.  XXXXXXXXXX           X

                               3.  XXXXXXXXXX           X

                               4.  XXXXXXXXXX           X

                               5.  XXXXXXXXXX           X

                               6.  XXXXXXXXXX           X

                               7.  XXXXXXXXXX           X

                               8.  XXXXXXXXXX           X

                               9.  XXXXXXXXXX           X

                              10.  XXXXXXXXXX           X
```

```
                WAQC011                           1 of 1
                                                  12/17/76
 PSF Transaction Report
             SouthWestern Ohio Regional Computer Center
EXHIBIT  WAQC.303


                                                     MODEL STATE INFORMATION SYSTEM
  WAQC011                                          WATER QUALITY COMPLIANCE SUBSYSTEM

  DATE XX/XX/XX                              INPUT TRANSACTION REPORT - PERIODIC SAMPLE FILE                            PAGE ZZZZ9

                                                                        CARD COLUMNS
                                                   1         2         3         4         5         6         7         8
                             REJECT      12345678901234567890123456789012345678901234567890123456789012345678901234567890
                               *         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                               *         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
                               *         X------------------------------------------------------------------------------X
                                         X------------------------------------------------------------------------------X
             WAQC020                        1 of 1
                                            12/30/76
 SAF Update Module
             SouthWestern Ohio Regional Computer Center
EXHIBIT WAQC.304


 WAQC020                                      MODEL STATE INFORMATION SYSTEM
                                             WATER QUALITY COMPLIANCE SUBSYSTEM
 DATE XX/XX/XX                              SAMPLE ANALYSIS FILE DELETION REPORT                                   PAGE ZZZZ9

                RECORD KEY                                          REMAINDER OF THE RECORD

     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
          WAQC041                       1 OF 1
                                        1/13/77
RADIOLOGICAL MCL VIOLATIONS REPORT MODULE
        SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.306


                                         MODEL STATE INFORMATION SYSTEM
WAQC041                                 WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                             CHEMICAL MCL VIOLATIONS REPORT                            PAGE ZZZZ9

PERIOD XX/XX/XX TO XX/XX/XX

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---            REGION                     DISTRICT             ----NOTIFY---
                                                                                                      PUBLIC  STATE
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              XX                         XX                   X       X

  -------------LABORATORY--------------          ------------CONTAMINANT-------------          ---------PWS-----------
   ID                NAME                        ID               NAME                         TYPE  POPULATION  SOURCE

  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            X    XXXXXXXXX    X

 ---SAMPLE----         ---------ANALYSIS----------         -------VIOLATION-------       ----MCL---         REGULATION
  DATE   TYPE            DATE    METHOD   RESULTS          TYPE    DATE   DURATION        VIOLATED            LEVEL
                                                                          (MONTHS)
 XX/XX/XX  XX          XX/XX/XX   XXX   XXXXXXXXXX           X   XX/XX/XX    XX          XXXXXXXXXX            XX

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---            REGION                     DISTRICT             ----NOTIFY---
                                                                                                      PUBLIC  STATE
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              XX                         XX                   X       X

  -------------LABORATORY--------------          ------------CONTAMINANT-------------          ---------PWS-----------
   ID                NAME                        ID               NAME                         TYPE  POPULATION  SOURCE

  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            X    XXXXXXXXX    X

 ---SAMPLE----         ---------ANALYSIS----------         -------VIOLATION-------       ----MCL---         REGULATION
  DATE   TYPE            DATE    METHOD   RESULTS          TYPE    DATE   DURATION        VIOLATED            LEVEL
                                                                          (MONTHS)
 XX/XX/XX  XX          XX/XX/XX   XXX   XXXXXXXXXX           X   XX/XX/XX    XX          XXXXXXXXXX            XX
```

```
             WAQC050                            1 OF 1
                                                2/11/77
BACTERIOLOGICAL SAMPLING VIOLATIONS REPORT MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
   EXHIBIT WAQC.307

                                                   MODEL STATE INFORMATION SYSTEM
WAQC050                                          WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX                                BACTERIOLOGICAL MCL VIOLATIONS REPORT                                       PAGE ZZZZ9
PERIOD XX/XX/XX TO XX/XX/XX

   PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                          DISTRICT                 ----NOTIFY---
                                                                                                                  PUBLIC  STATE
  XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                XX                              XX                       X       X
  -------------LABORATORY--------------             ------------CONTAMINANT-------------            ----------PWS-------------
    ID                 NAME                           ID               NAME                         TYPE   POPULATION   SOURCE
   XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              X      XXXXXXXXX     X
  ---SAMPLE----          ---------ANALYSIS----------           -------VIOLATION-------          ----MCL---           REGULATION
    DATE   TYPE            DATE    METHOD   RESULTS            TYPE    DATE    DURATION          VIOLATED              LEVEL
                                                                               (MONTHS)
  XX/XX/XX  X            XX/XX/XX   XXX   XXXXXXXXXX            XX   XX/XX/XX    XX             XXXXXXXXXX              XX

   PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                          DISTRICT                 ----NOTIFY---
                                                                                                                  PUBLIC  STATE
  XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                XX                              XX                       X       X
  -------------LABORATORY--------------             ------------CONTAMINANT-------------            ----------PWS-------------
    ID                 NAME                           ID               NAME                         TYPE   POPULATION   SOURCE
   XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              X      XXXXXXXXX     X
  ---SAMPLE----          ---------ANALYSIS----------           -------VIOLATION-------          ----MCL---           REGULATION
    DATE   TYPE            DATE    METHOD   RESULTS            TYPE    DATE    DURATION          VIOLATED              LEVEL
                                                                               (MONTHS)
  XX/XX/XX  X            XX/XX/XX   XXX   XXXXXXXXXX            XX   XX/XX/XX    XX             XXXXXXXXXX              XX
```

```
               WAQC051                          1 OF 1
                                                2/11/77
TURBIDITY SAMPLING VIOLATIONS REPORT MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.308


WAQC051                                           MODEL STATE INFORMATION SYSTEM
DATE XX/XX/XX                                   WATER QUALITY COMPLIANCE SUBSYSTEM
                                                TURBIDITY MCL VIOLATIONS REPORT
PERIOD XX/XX/XX TO XX/XX/XX                                                                                           PAGE 22229

   PWS-ID   ---PUBLIC WATER SYSTEM NAME---              REGION                        DISTRICT                 ----NOTIFY---
  XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XX                             XX                    PUBLIC  STATE
                                                                                                                 X      X
  -------------LABORATORY--------------            ------------CONTAMINANT-------------           ----------PWS-------------
    ID                NAME                          ID              NAME                          TYPE   POPULATION   SOURCE
  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX             XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX             X      XXXXXXXXX     X
 ---SAMPLE----          ---------ANALYSIS----------           -------VIOLATION-------        ----MCL---           REGULATION
   DATE   TYPE            DATE    METHOD   RESULTS            TYPE   DATE   DURATION          VIOLATED              LEVEL
                                                                            (MONTHS)
 XX/XX/XX  X            XX/XX/XX   XXX   XXXXXXXXXX            XX  XX/XX/XX     XX           XXXXXXXXXX              XX

   PWS-ID   ---PUBLIC WATER SYSTEM NAME---              REGION                        DISTRICT                 ----NOTIFY---
  XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XX                             XX                    PUBLIC  STATE
                                                                                                                 X      X
  -------------LABORATORY--------------            ------------CONTAMINANT-------------           ----------PWS-------------
    ID                NAME                          ID              NAME                          TYPE   POPULATION   SOURCE
  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX             XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX             X      XXXXXXXXX     X
 ---SAMPLE----          ---------ANALYSIS----------           -------VIOLATION-------        ----MCL---           REGULATION
   DATE   TYPE            DATE    METHOD   RESULTS            TYPE   DATE   DURATION          VIOLATED              LEVEL
                                                                            (MONTHS)
 XX/XX/XX  X            XX/XX/XX   XXX   XXXXXXXXXX            XX  XX/XX/XX     XX           XXXXXXXXX               XX

                 ↓                                                    ↓                                          ↓
                 WAQC041                        1 OF 1
                                                1/13/77
RADIOLOGICAL MCL VIOLATIONS REPORT MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.309


                                                   MODEL STATE INFORMATION SYSTEM
WAQC041                                          WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                                   RADIOLOGICAL MCL VIOLATIONS REPORT                                     PAGE ZZZZ9

PERIOD XX/XX/XX TO XX/XX/XX

   PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                         DISTRICT               ----NOTIFY---
                                                                                                               PUBLIC  STATE
  XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                XX                             XX                    X       X

   -------------LABORATORY--------------            ------------CONTAMINANT-------------            ---------PWS------------
    ID                 NAME                          ID               NAME                          TYPE  POPULATION  SOURCE

   XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX             X    XXXXXXXXX    X

  ---SAMPLE----          ---------ANALYSIS----------           -------VIOLATION-------         ----MCL---        REGULATION
    DATE   TYPE                DATE    METHOD   RESULTS            TYPE    DATE   DURATION          VIOLATED            LEVEL
                                                                              (MONTHS)
  XX/XX/XX  XX           XX/XX/XX   XXX   XXXXXXXXXX            X    XX/XX/XX    XX            XXXXXXXXXX            XX

   PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                         DISTRICT               ----NOTIFY---
                                                                                                               PUBLIC  STATE
  XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                XX                             XX                    X       X

   -------------LABORATORY--------------            ------------CONTAMINANT-------------            ---------PWS------------
    ID                 NAME                          ID               NAME                          TYPE  POPULATION  SOURCE

   XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX             X    XXXXXXXXX    X

  ---SAMPLE----          ---------ANALYSIS----------           -------VIOLATION-------         ----MCL---        REGULATION
    DATE   TYPE                DATE    METHOD   RESULTS            TYPE    DATE   DURATION          VIOLATED            LEVEL
                                                                              (MONTHS)
  XX/XX/XX  XX           XX/XX/XX   XXX   XXXXXXXXXX            X    XX/XX/XX    XX            XXXXXXXXXX            XX
```

```
           WAQC060                                    1 OF 1
                                                      2/11/77
 CHEMICAL SAMPLING VIOLATIONS REPORT MODULE
         SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.310


WAQC060                                         MODEL STATE INFORMATION SYSTEM
                                               WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX
                                              CHEMICAL SAMPLING VIOLATIONS REPORT                          PAGE 22229
PERIOD XX/XX/XX TO XX/XX/XX

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---                REGION                     DISTRICT
                                                                                                         ----NOTIFY---
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                  XX                          XX                PUBLIC  STATE
                                                                                                            X      X
  --------------LABORATORY--------------          ------------CONTAMINANT-------------
   ID                  NAME                         ID             NAME                            ---------PWS-----------
                                                                                                   TYPE  POPULATION  SOURCE
  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX           XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                         ①                                                          X    XXXXXXXXX     X
 ---SAMPLE----     SAMPLING  ------NUMBER XXXXXXX SAMPLES----        -------VIOLATION-------
   DATE   TYPE     CUT-OFF       REQUIRED            TAKEN           TYPE    DATE   DURATION      SAMPLING-      REGULATION
                     DATE    FEDERAL STATE      FEDERAL STATE                        (MONTHS)      FREQUENCY        LEVEL
                                                                                                   VIOLATED
 XX/XX/XX  X       XX/XX/XX    XXXX   XXXX        XXXX   XXXX         XX   XX/XX/XX    XX
                                                                                                     XXX            XX

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---                REGION                     DISTRICT
                                                                                                         ----NOTIFY---
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                  XX                          XX                PUBLIC  STATE
                                                                                                            X      X
  --------------LABORATORY--------------          ------------CONTAMINANT-------------
   ID                  NAME                         ID             NAME                            ---------PWS-----------
                                                                                                   TYPE  POPULATION  SOURCE
  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX           XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                         ①                                                          X    XXXXXXXXX     X
 ---SAMPLE----     SAMPLING    ----NUMBER XXXXXXX SAMPLES----        -------VIOLATION-------
   DATE   TYPE     CUT-OFF       REQUIRED            TAKEN           TYPE    DATE   DURATION      SAMPLING-      REGULATION
                     DATE    FEDERAL STATE      FEDERAL STATE                        (MONTHS)      FREQUENCY        LEVEL
                                                                                                   VIOLATED
 XX/XX/XX  X       XX/XX/XX    XXXX   XXXX        XXXX   XXXX         XX   XX/XX/XX    XX
                                                                                                     XXX            XX
```

① WILL CONTAIN EITHER "REGULAR" OR "CHECK"
DEPENDING ON VIOLATION TYPE.

WAQC070   1 OF 1
7/11/77

BACTERIOLOGICAL MCL VIOLATIONS REPORT MODULE
SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.311

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                                                  MODEL STATE INFORMATION SYSTEM
WAQC070                                          WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                                   BACTERIOLOGICAL SAMPLING VIOLATIONS REPORT                                  PAGE ZZZZ9

PERIOD XX/XX/XX TO XX/XX/XX                                                                                                 CYCLE    29

   PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                          DISTRICT                ----NOTIFY---
                                                                                                                 PUBLIC  STATE
  XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XX                               XX                     X       X

  --------------LABORATORY--------------          ------------CONTAMINANT-------------           ---------PWS------------
   ID                  NAME                        ID               NAME                          TYPE  POPULATION  SOURCE

  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX             XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX              X     XXXXXXXXX     X
                                                ①
 ---SAMPLE----      SAMPLING   ------NUMBER XXXXXXX SAMPLES----        -------VIOLATION-------      SAMPLING-        REGULATION
  DATE    TYPE      CUT-OFF        REQUIRED            TAKEN          TYPE    DATE   DURATION      FREQUENCY          LEVEL
                     DATE     FEDERAL  STATE      FEDERAL  STATE                      (MONTHS)      VIOLATED

 XX/XX/XX  X       XX/XX/XX    XXXX    XXXX        XXXX    XXXX         XX   XX/XX/XX    XX          XXX               XX

   PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                          DISTRICT                ----NOTIFY---
                                                                                                                 PUBLIC  STATE
  XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XX                               XX                     X       X

  --------------LABORATORY--------------          ------------CONTAMINANT-------------           ---------PWS------------
   ID                  NAME                        ID               NAME                          TYPE  POPULATION  SOURCE

  XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX             XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX              X     XXXXXXXXX     X
                                                ①
 ---SAMPLE----      SAMPLING     ----NUMBER XXXXXXX SAMPLES----        -------VIOLATION-------      SAMPLING-        REGULATION
  DATE    TYPE      CUT-OFF        REQUIRED            TAKEN          TYPE    DATE   DURATION      FREQUENCY          LEVEL
                     DATE     FEDERAL  STATE      FEDERAL  STATE                      (MONTHS)      VIOLATED

 XX/XX/XX  X       XX/XX/XX    XXXX    XXXX        XXXX    XXXX         XX   XX/XX/XX    XX          XXX               XX
```

① WILL CONTAIN EITHER "REGULAR" OR "CHECK"
DEPENDING ON VIOLATION TYPE.

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          WAQC080                          1 OF 1
                                           2/11/77
TURBIDITY MCL VIOLATIONS REPORT MODULE
       SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.312


                                            MODEL STATE INFORMATION SYSTEM
WAQC080                                     WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                              TURBIDITY SAMPLING VIOLATIONS REPORT                                PAGE ZZZZ9

PERIOD XX/XX/XX TO XX/XX/XX                                                                                    CYCLE    29

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION                       DISTRICT              ----NOTIFY---
                                                                                                           PUBLIC  STATE
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX               XX                            XX                    X       X

 -----      ----LABORATORY----------------          ------------CONTAMINANT------------          ----------PWS-------------
  ID                 NAME                            ID            NAME                         TYPE  POPULATION  SOURCE

 XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX         X    XXXXXXXXX    X
                                                ①
 ---SAMPLE----     SAMPLING  |------NUMBER XXXXXXX SAMPLES----        -------VIOLATION-------       SAMPLING-        REGULATION
  DATE   TYPE      CUT-OFF        REQUIRED           TAKEN          TYPE    DATE   DURATION       FREQUENCY          LEVEL
                     DATE    FEDERAL STATE      FEDERAL STATE                      (MONTHS)        VIOLATED

 XX/XX/XX  X       XX/XX/XX   XXXX   XXXX        XXXX   XXXX         XX  XX/XX/XX     XX             XXX               XX

  PWS-ID   ---PUBLIC WATER SYSTEM NAME---               REGION                       DISTRICT              ----NOTIFY---
                                                                                                           PUBLIC  STATE
 XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                XX                            XX                    X       X

 ------- -----LABORATORY---------------             ------------CONTAMINANT------------          ------ --PWS-----------
  ID                NAME                             ID            NAME                         TYPE  POPULATION  SOURCE

 XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX         X    XXXXXXXXX    X
                                                ①
 --SAMPLE----      SAMPLING        NUMBER XXXXXXX SAMPLES----         -------VIOLATION-------       SAMPLING-        REGULATION
  DATE   TYPE      CUT-OFF        REQUIRED           TAKEN          TYPE    DATE   DURATION       FREQUENCY          LEVEL
                     DATE    FEDERAL STATE      FEDERAL STATE                      (MONTHS)        VIOLATED

 XX/XX/XX  X       XX/XX/XX   XXXX   XXXX        XXXX   XXXX         XX  XX/XX/XX     XX             XXX               XX

 ① WILL CONTAIN EITHER "REGULAR" OR "REPEAT"
   DEPENDING ON VIOLATION TYPE
```

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          WAQC061                          1 OF 1
                                           2/11/77
RADIOLOGICAL SAMPLING VIOLATIONS REPORT MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.313


WAQC061                                      MODEL STATE INFORMATION SYSTEM
                                            WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX
                                           RADIOLOGICAL SAMPLING VIOLATIONS REPORT
PERIOD XX/XX/XX TO XX/XX/XX                                                                          PAGE ZZZZ9

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION
                                                                          DISTRICT                ----NOTIFY---
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XX                                    PUBLIC   STATE
                                                                             XX                     X        X
  -------------LABORATORY-------------             ------------CONTAMINANT-------------
  ID                NAME                            ID              NAME                      ---------PWS-----------
                                                                                              TYPE  POPULATION  SOURCE
 XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX             XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                          ①                                                    X    XXXXXXXXX     X
---SAMPLE----      SAMPLING     ------NUMBER XXXXXXX SAMPLES----
 DATE   TYPE       CUT-OFF          REQUIRED             TAKEN          -------VIOLATION-------   SAMPLING-        REGULATION
                     DATE       FEDERAL STATE        FEDERAL STATE      TYPE    DATE   DURATION   FREQUENCY          LEVEL
                                                                                       (MONTHS)   VIOLATED
XX/XX/XX  X        XX/XX/XX      XXXX   XXXX          XXXX   XXXX
                                                                         XX   XX/XX/XX    XX         XXX              XX

  PWS-ID    ---PUBLIC WATER SYSTEM NAME---              REGION
                                                                          DISTRICT                ----NOTIFY---
 XXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                 XX                                    PUBLIC   STATE
                                                                             XX                     X        X
  -------------LABORATORY-------------             ------------CONTAMINANT-------------
  ID                NAME                            ID              NAME                      ---------PWS-----------
                                                                                              TYPE  POPULATION  SOURCE
 XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX             XXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                          ①                                                    X    XXXXXXXXX     X
---SAMPLE----      SAMPLING     ----NUMBER XXXXXXX SAMPLES----
 DATE   TYPE       CUT-OFF          REQUIRED             TAKEN          -------VIOLATION-------   SAMPLING-        REGULATION
                     DATE       FEDERAL STATE        FEDERAL STATE      TYPE    DATE   DURATION   FREQUENCY          LEVEL
                                                                                       (MONTHS)   VIOLATED
XX/XX/XX  X        XX/XX/XX      XXXX   XXXX          XXXX   XXXX
                                                                         XX   XX/XX/XX    XX         XXX              XX

① WILL CONTAIN EITHER "REGULAR" OR "CHECK"
  DEPENDING ON VIOLATION TYPE
```

```
                 WAQC 220                  1 OF 1
                                           1/4/77
SAF PURGE MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.315


                                              MODEL STATE INFORMATION SYSTEM
WAQC220                                      WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                               SAMPLE ANALYSIS FILE - PURGE REPORT                          PAGE ZZZZ9
                   RECORD KEY                                    REMAINDER OF RECORD

       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

WAQC220 1 of 1
1/4/77
SAF Purge Module
SouthWestern Ohio Regional Computer Center
EXHIBIT WAQC.316

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WAQC220                         MODEL STATE INFORMATION SYSTEM
                               WATER QUALITY COMPLIANCE SUBSYSTEM

                            SAMPLE ANALYSIS FILE PURGE STATISTICS REPORT                      PAGE ZZZZ9

                                                                         % RELATIVE TO THE
                                                                TOTAL      ORIGINAL FILE

                 1. NUMBER OF RECORDS ORIGINALLY ON THE FILE   ZZZ,ZZZ,ZZ9

                 2. NUMBER OF RECORDS PURGED FROM FILE         ZZZ,ZZZ,ZZ9      ZZZ9 %

                 3. NUMBER OF RECORDS NOW ON FILE              ZZZ,ZZZ,ZZ9      ZZZ9 %
```

```
               WAQC140                    1 OF 1
                                          3/24/77
CHEMICAL AND RADIOLOGICAL SCHEDULE REPORT MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.319
```

```
                                          MODEL STATE INFORMATION SYSTEM
 WAQC140                                 WATER QUALITY COMPLIANCE SUBSYSTEM

 DATE XX/XX/XX                      PWS SCHEDULED FOR CHEMICAL/RADIOLOGICAL SAMPLING                           PAGE 2229

 REGION                                                   PWS               CONTAMINANT               SAMPLING PERIOD
    DISTRICT PWS-ID      PUBLIC WATER SYSTEM NAME         TYPE  POPULATION  ID   NAME                 START      END

  XX   XX    XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      X    XXXXXXXXX   XXXX XXXXXXXXXXXXXXX   XX/XX/XX  XX/XX/XX
                                                                            XXXX XXXXXXXXXXXXXXX   XX/XX/XX  XX/XX/XX
                                                                            XXXX XXXXXXXXXXXXXXX   XX/XX/XX  XX/XX/XX


                                                                            TOTAL INORGANIC CHEMICAL SAMPLES       XXX

                                                                            TOTAL ORGANIC CHEMICAL SAMPLES         XXX

                                                                            TOTAL NATURAL RADIONUCLIDE SAMPLES     XXX

                                                                            TOTAL MAN MADE RADIONUCLIDE SAMPLES    XXX



 *                      DISTRICT  XX  TOTAL PWS SCHEDULED TD SAMPLE FOR INORGANIC CHEMICAL ANALYSIS   XXXX
                                                                  ORGANIC CHEMICAL ANALYSIS   XXXX
                                                              NATURAL RADIONUCLIDE ANALYSIS   XXXX
                                                             MAN-MADE RADIONUCLIDE ANALYSIS   XXXX

 **                     REGION    XX  TOTAL PWS SCHFDULED TO SAMPLE FOR INORGANIC CHEMICAL ANALYSIS   XXXX
                                                                  ORGANIC CHEMICAL ANALYSIS   XXXX
                                                              NATURAL RADIONUCLIDE ANALYSIS   XXXX
                                                             MAN-MADE RADIONUCLIDE ANALYSIS   XXXX

 ***                    STATE         TOTAL PWS SCHEDULED TO SAMPLE FOR INORGANIC CHEMICAL ANALYSIS   XXXX
                                                                  ORGANIC CHEMICAL ANALYSIS   XXXX
                                                              NATURAL RADIONUCLIDE ANALYSIS   XXXX
                                                             MAN-MADE RADIONUCLIDE ANALYSIS   XXXX
```

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              WAQC125                              1 OF 1
                                                   2/8/77
VIF SELECTION MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
 EXHIBIT WAQC.320


                                                  MODEL STATE INFORMATION SYSTEM
WAQC125                                          WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                                      COMPLIANCE SUMMARY REPORT                                    PAGE ZZZZ9

STATE XX          REGION XX          DISTRICT XX                                                     COMPLIANCE CYCLE    Z9

                    PWS                      PUBLIC WATER SYSTEM                PWS         ---------PWS--------
                    ID                              NAME                        TYPE        POPULATION    SOURCE

                  XXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                X           XXXXXXXXX       X

-------------VIOLATION------------   CONTAMINANT  LABORATORY   ---------ANALYSIS----------  ----MCL---  ----NOTIFY---  REG.
  ID        DATE      TYPE  DURATION     ID        ID  OWNER     DATE    METHOD   RESULT      VIOLATED   PUBLIC  STATE  LEVEL
                            (MONTHS)

XXXXX    XX/XX/XX    XX      XX        XXXX      XXXXX  X    XX/XX/XX   XXX   XXXXXXXXXX  XXXXXXXXXX    X       X      XX

------NUMBER OF SAMPLES------   --------------SAMPLE---------------   FREQUENCY  LAST REPORT    LAST           REMARKS
REQUIRED  TAKEN  IN VIOLATION    DATE     TYPE    KEY     CUTOFF DATE   VIOLATED   DATE   TIME   UPDATE

  XXXX     XXXX      XXXX       XX/XX/XX  X  XXXXXXXXXX  XX/XX/XX        XXX     XX/XX/XX  XX  XX/XX/XX  XXXXXXXXXXXXXXXXXXXXXXXXX


*     TOTAL VIOLATIONS PER PWS        VIOLATIONS OF STATE REGULATIONS: Z,ZZZ,ZZ9    VIOLATIONS OF FEDERAL REGULATIONS: Z,ZZZ,ZZ9
**    TOTAL VIOLATIONS FOR DISTRICT   VIOLATIONS OF STATE REGULATIONS: Z,ZZZ,ZZ9    VIOLATIONS OF FEDERAL REGULATIONS: Z,ZZZ,ZZ9
***   TOTAL VIOLATIONS FOR REGION     VIOLATIONS OF STATE REGULATIONS: Z,ZZZ,ZZ9    VIOLATIONS OF FEDERAL REGULATIONS: Z,ZZZ,ZZ9
****  TOTAL VIOLATIONS FOR STATE      VIOLATIONS OF STATE REGULATIONS: Z,ZZZ,ZZ9    VIOLATIONS OF FEDERAL REGULATIONS: Z,ZZZ,ZZ9
```

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              WAQC110                           1 OF 1
                                                3/4/77
CHEMICAL ANALYSES SUMMARY REPORT MODULE
              SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.321


                                                  MODEL STATE INFORMATION SYSTEM
WAQC110                                           WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                 SUMMARY OF CHEMICAL ANALYSIS REPORT FROM XX/XX/XX TO XX/XX/XX                        PAGE ZZZZ9

 REGION   DISTRICT  PWS-ID      PUBLIC WATER SYSTEM NAME        PWS TYPE    POPULATION     SOURCE

   XX        XX     XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX        X        XXXXXXXXX        X

  SAMPLE    -----CONTAMINANT----                           SAMPLE  SAMPLE    LAB   ----ANALYSIS----  NUMBER    -------VIOLATION--------
   KEY       ID        NAME                                 TYPE    DATE      ID    RESULT  METHOD  SAMPLES   STATE  FEDERAL  DURATION

XXXXXXXXXX  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            X     XX/XX/XX  XXXXX  XXXXXXXXXX XXX    XXXX      XXX     XXX      XXX

XXXXXXXXXX  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX            X     XX/XX/XX  XXXXX  XXXXXXXXXX XXX    XXXX      XXX     XXX      XXX
    ↓         ↓        ↓                                   ↓        ↓        ↓        ↓       ↓      ↓         ↓       ↓        ↓

* [ CONTAMINANT  SAMPLE  ---------ANALYSIS RESULT---------  -------MCL-------  NUMBER  ------------VIOLATION------------      ]
     SUMMARY     TYPE       LOW       AVERAGE      HIGH      STATE   FEDERAL   SAMPLES  STATE    FEDERAL  LONGEST DURATION
                  X     XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX   XXXX   XXXXXXX  XXXXXXX       XXXX

                  X     XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX   XXXX   XXXXXXX  XXXXXXX       XXXX
                  ↓         ↓           ↓           ↓          ↓        ↓        ↓        ↓        ↓           ↓

* NOTE:  IF THE CONTAMINANT ID IS NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, ONLY DETAILS ARE TO BE PRINTED; NO
         CONTAMINANT SUMMARIES WILL BE PRODUCED.  CONTAMINANT SUMMARIES ARE TO BE PRODUCED IN THE FOLLOWING ORDER: C - CHECK;
         D - REGULAR DISTRIBUTION; P - PLANT TAP; R   RAW WATER; S - SPECIAL.

** [                            TOTAL  POPULATION    CHECK   REGULAR  PLANT TAP  RAW WATER  SPECIAL  ----------VIOLATION------------ ]
                                 PWS                SAMPLES  SAMPLES   SAMPLES    SAMPLES   SAMPLES  STATE  FEDERAL  LONGEST DURATION
    *   TOTAL FOR DISTRICT      ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9 ZZZZZ9        ZZZ9
    **  TOTAL FOR REGION        ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9 ZZZZZ9        ZZZ9
   ***  TOTAL FOR STATE         ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9 ZZZZZ9        ZZZ9

** NOTE:  IF THE DISTRICT AND THE REGION ARE NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, NO TOTALS ARE TO BE PRODUCED.

   NOTE:  TO PRODUCE THE REPORT IN THE ABOVE FORMAT, THE "SORT" PROCESSING OPTIONS RECORD MUST BE:  01 - REGION; 02 - DISTRICT;
          03 - PWS-ID; AND 04 - CONTAMINANT ID.
```

WAQC111 1 OF 1

3/4/77

RADIOLOGICAL ANALYSES SUMMARY REPORT MODULE

SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER

EXHIBIT WAQC.322

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                                                   MODEL STATE INFORMATION SYSTEM
WAQC111                                           WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX                 SUMMARY OF RADIOLOGICAL ANALYSIS REPORT FROM XX/XX/XX TO XX/XX/XX                  PAGE ZZZZ9
 REGION  DISTRICT  PWS-ID      PUBLIC WATER SYSTEM NAME      PWS TYPE   POPULATION   SOURC
   XX       XX     XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      X        XXXXXXXXX      X
  SAMPLE   -----CONTAMINANT----                      SAMPLE  SAMPLE    LAB   ----ANALYSIS----  NUMBER   -------VIOLATION-------
   KEY       ID       NAME                            TYPE    DATE     ID    RESULT   METHOD  SAMPLES   STATE  FEDERAL  DURATION
XXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       X    XX/XX/XX  XXXXX XXXXXXXXXX XXX     XXXX      XXX     XXX      XXX
XXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       X    XX/XX/XX  XXXXX XXXXXXXXXX XXX     XXXX      XXX     XXX      XXX

*  CONTAMINANT  SAMPLE  ----------------RESULT----------------  -------MCL-------  NUMBER   ------------VIOLATION-------------
     SUMMARY     TYPE      LOW        AVERAGE       HIGH        STATE    FEDERAL   SAMPLES  STATE    FEDERAL  LONGEST DURATION
                  X    XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX    XXXX   XXXXXXX  XXXXXXX      XXXX
                  X    XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX    XXXX   XXXXXXX  XXXXXXX      XXXX
```

* NOTE: IF THE CONTAMINANT ID IS NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, ONLY DETAILS ARE TO BE PRINTED; NO CONTAMINANT SUMMARIES WILL BE PRODUCED. CONTAMINANT SUMMARIES ARE TO BE PRODUCED IN THE FOLLOWING ORDER: C - CHECK; D - REGULAR DISTRIBUTION; P - PLANT TAP; R - RAW WATER; S - SPECIAL.

```
                             TOTAL  POPULATION    CHECK    REGULAR  PLANT TAP  RAW WATER  SPECIAL  ------------VIOLATION-------------
                              PWS                SAMPLES   SAMPLES   SAMPLES    SAMPLES   SAMPLES  STATE  FEDERAL  LONGEST DURATION
 *    TOTAL FOR DISTRICT     ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9   ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9
 **   TOTAL FOR REGION       ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9   ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9
 ***  TOTAL FOR STATE        ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9   ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9
```

** NOTE: IF THE DISTRICT AND THE REGION ARE NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, NO TOTALS ARE TO BE PRODUCED.

NOTE: TO PRODUCE THE REPORT IN THE ABOVE FORMAT, THE "SORT" PROCESSING OPTIONS RECORD MUST BE: 01 - REGION; 02 DISTRICT 03 - PWS-ID; AND 04 - CONTAMINANT ID.

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           WAQC112                         1 OF 1
                                           3/8/77
BACTERIOLOGICAL SUMMARY ANALYSIS REPORT MODULE
           SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.323


                                                     MODEL STATE INFORMATION SYSTEM
 WAQC112                                           WATER QUALITY COMPLIANCE SUBSYSTEM
 DATE XX/XX/XX             SUMMARY OF BACTERIOLOGICAL ANALYSIS REPORT FROM XX/XX/XX TO XX/XX/XX                   PAGE ZZZZ9

  REGION   DISTRICT  PWS-ID       PUBLIC WATER SYSTEM NAME        PWS TYPE     POPULATION     SOURCE

    XX        XX    XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX         X         XXXXXXXXX         X

   SAMPLE    -----CONTAMINANT----        RECORD      SAMPLE  SAMPLE     LAB   ----ANALYSIS----  NUMBER    -------VIOLATION--------
    KEY       ID        NAME              TYPE        TYPE    DATE       ID   RESULT  METHOD   SAMPLES   STATE  FEDERAL  DURATION

 XXXXXXXXXX  XXXX XXXXXXXXXXXXXXX          D            X   XX/XX/XX  XXXXX  XXXXXXXXXX  XXX    XXXX      XXX     XXX      XXX

 XXXXXXXXXX  XXXX XXXXXXXXXXXXXXX          D            X   XX/XX/XX  XXXXX  XXXXXXXXXX  XXX    XXXX      XXX     XXX      XXX
     ↓         ↓        ↓                  ↓            ↓       ↓       ↓        ↓        ↓       ↓        ↓       ↓        ↓

   SAMPLE    -----CONTAMINANT----    RECORD  SAMPLE  --------ANALYSIS RESULT----------METHOD ---NUM SAMPLES  --------VIOLATION-------
    KEY       ID        NAME          TYPE    TYPE     LOW        AVERAGE      HIGH           REGULAR  CHECK   STATE  FEDERAL DURATION

 XXXXXXXXXX  XXXX XXXXXXXXXXXXXXX      S        X   XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX  XXX     XXXX     XXXX  XXXXXXX XXXXXXX   XXX

 XXXXXXXXXX  XXXX XXXXXXXXXXXXXXX      S        X   XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX  XXX     XXXX     XXXX  XXXXXXX XXXXXXX   XXX
     ↓         ↓        ↓              ↓        ↓       ↓          ↓          ↓        ↓       ↓        ↓       ↓       ↓       ↓

* [  CONTAMINANT  SAMPLE  --------ANALYSIS RESULT-----------  -------MCL-------   NUMBER  ------------VIOLATION------------          ]
  [    SUMMARY     TYPE      LOW       AVERAGE       HIGH      STATE   FEDERAL   SAMPLES  STATE    FEDERAL  LONGEST DURATION          ]
  [                                                                                                                                   ]
  [                 X     XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX   XXXX   XXXXXXX  XXXXXXX       XXXX                   ]
  [                                                                                                                                   ]
  [                 X     XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX   XXXX   XXXXXXX  XXXXXXX       XXXX                   ]
  [                 ↓         ↓           ↓           ↓           ↓        ↓        ↓       ↓        ↓            ↓                    ]

*  NOTE: IF THE CONTAMINANT ID IS NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, ONLY DETAILS ARE TO BE PRINTED; NO
         CONTAMINANT SUMMARIES WILL BE PRODUCED.  CONTAMINANT SUMMARIES ARE TO BE PRODUCED IN THE FOLLOWING ORDER: C - CHECK; D -
         REGULAR DISTRIBUTION; P - PLANT TAP; R - RAW WATER; S - SPECIAL.

**[                                   TOTAL  POPULATION    CHECK   REGULAR  PLANT TAP  RAW WATER  SPECIAL  ----------VIOLATION------------ ]
  [                                    PWS                SAMPLES  SAMPLES   SAMPLES    SAMPLES   SAMPLES  STATE  FEDERAL  LONGEST DURATION ]
  [                                                                                                                                          ]
  [   *   TOTAL FOR DISTRICT          ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9         ]
  [                                                                                                                                          ]
  [   **  TOTAL FOR REGION            ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9         ]

      *** TOTAL FOR STATE             ZZZZ9  ZZZ,ZZZ,ZZ9  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9

**  NOTE: IF THE DISTRICT AND THE REGION ARE NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, NO TOTALS ARE TO BE PRODUCED.
    NOTE:  TO PRODUCE THE REPORT IN THE ABOVE FORMAT, THE "SORT" PROCESSING OPTIONS RECORD MUST BE: 01 - REGION;  02 - DISTRICT;
           03 - PWS-ID; AND 04 - CONTAMINANT ID.
```

WAQC113   1 OF 1
                           3/4/77

TURBIDITY SUMMARY ANALYSIS REPORT MODULE

SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER

EXHIBIT WAQC.324

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                                               MODEL STATE INFORMATION SYSTEM
WAQC113                                      WATER QUALITY COMPLIANCE SUBSYSTEM

DATE XX/XX/XX                     SUMMARY OF TURBIDITY ANALYST REPORT FROM XX/XX/XX TO XX/XX/XX                 PAGE ZZZZ9

REGION   DISTRICT  PWS-ID      PUBLIC WATER SYSTEM NAME        PWS TYPE    POPULATION    SOURCE

  XX        XX     XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXX         X        XXXXXXXXX        X

 SAMPLE    -----CONTAMINANT----         RECORD         SAMPLE  SAMPLE    LAB   ----ANALYSIS----  NUMBER    -------VIOLATION---------
  KEY       ID        NAME              TYPE           TYPE    DATE      ID    RESULT   METHOD  SAMPLES   STATE  FEDERAL  DURATION

XXXXXXXXXX XXXX XXXXXXXXXXXXXXX           D              X   XX/XX/XX  XXXXX  XXXXXXXXXX  XXX    XXXX      XXX     XXX      XXX

XXXXXXXXXX XXXX XXXXXXXXXXXXXXX           D              X   XX/XX/XX  XXXXX  XXXXXXXXXX  XXX    XXXX      XXX     XXX      XXX
    ↓        ↓        ↓                   ↓              ↓       ↓        ↓        ↓        ↓      ↓         ↓       ↓        ↓

 SAMPLE    -----CONTAMINANT----  RECORD  SAMPLE  --------ANALYSIS RESULT----------METHOD ---NUM SAMPLES  --------VIOLATION-------
  KEY       ID        NAME        TYPE    TYPE     LOW       AVERAGE      HIGH            REGULAR  CHECK    STATE FEDERAL DURATION

XXXXXXXXXX XXXX XXXXXXXXXXXXXXX     S       X    XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX  XXX     XXXX    XXXX  XXXXXXX XXXXXXX   XXX

XXXXXXXXXX XXXX XXXXXXXXXXXXXXX     S       X    XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX  XXX     XXXX    XXXX  XXXXXXX XXXXXXX   XXX
    ↓        ↓        ↓             ↓       ↓        ↓          ↓          ↓        ↓        ↓       ↓      ↓       ↓        ↓

*   CONTAMINANT  SAMPLE   --------ANALYSIS RESULT-----------  -------MCL-------   NUMBER   ------------VIOLATION------------
      SUMMARY     TYPE       LOW        AVERAGE      HIGH      STATE    FEDERAL   SAMPLES  STATE    FEDERAL LONGEST DURATION

                   X     XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX    XXXX   XXXXXXX  XXXXXXX       XXXX

                   X     XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX  XXXXXXXX XXXXXXXX    XXXX   XXXXXXX  XXXXXXX       XXXX
                   ↓         ↓           ↓           ↓           ↓        ↓         ↓       ↓        ↓             ↓
*   NOTE: IF THE CONTAMINANT ID IS NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, ONLY DETAILS ARE TO BE  PRINTED; NO
          CONTAMINANT SUMMARIES WILL BE PPODUCED.  CONTAMINANT SUMMARIES ARE TO BE PRODUCED IN THE FOLLOWING ORDER:  C - CHECK;
          D - REGULAR DISTRIBUTION; P - PLANT TAP; R - RAW WATER; S - SPECIAL.

**                                 TOTAL  POPULATION   CHECK   REGULAR  PLANT TAP  RAW WATER  SPECIAL  ----------VIOLATION------------
                                    PWS               SAMPLES  SAMPLES   SAMPLES    SAMPLES   SAMPLES  STATE  FEDERAL  LONGEST DURATION

     =    TOTAL FOR DISTRICT       ZZZZ9  ZZZ,ZZZ,ZZZ  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9

     ==   TOTAL FOR REGION         ZZZZ9  ZZZ,ZZZ,ZZZ  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9

     ===  TOTAL FOR STATE          ZZZZ9  ZZZ,ZZZ,ZZZ  ZZZZZZ9  ZZZZZZ9   ZZZZZZ9    ZZZZZZ9   ZZZZZZ9  ZZZZZ9  ZZZZZ9        ZZZ9
**  NOTE:  IF THE DISTRICT AND THE REGION ARE NOT SPECIFIED ON THE "SORT" PROCESSING OPTIONS RECORD, NO TOTALS ARE TO BE PRODUCED.

    NOTE:  TO PRODUCE THE REPORT IN THE ABOVE FORMAT, THE "SORT" PROCESSING OPTIONS RECORD MUST BE: 01 - REGION; 02 - DISTRICT;
           03 - PWS-ID; AND 04 - CONTAMINANT ID.
          WAQC090                      1 OF 1
                                       2/11/77
 LATE MONTHLY OPERATIONS REPORT MODULE
           SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.325

                                     MODEL STATE INFORMATION SYSTEM
 WAQC090                             WATER QUALITY COMPLIANCE SUBSYSTEM

 DATE XX/XX/XX                       OPERATION REPORT VIOLATIONS REPORT                          PAGE ZZZZ9

 PERIOD XX/XX/XX TO XX/XX/XX

                                                         ----------PWS------------      DATE OF     MONTHS SINCE
     PWS-ID    ---PUBLIC WATER SYSTEM NAME---   REGION  DISTRICT   TYPE  POPULATION  SOURCE   LAST REPORT   LAST REPORT

    XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    XX      XX       X    XXXXXXXXX    X      XX/XX/XX         XX
    XXXXXXX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    XX      XX       X    XXXXXXXXX    X      XX/XX/XX         XX
```

```
                         VARIES                                  1 OF 1
  EDIT FOR INORGANIC VIOLATION MODULE                           3/7/77
                 SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.326


                                                               MODEL STATE INFORMATION SYSTEM
   WAQCXXX ①                                                  WATER QUALITY COMPLIANCE SUBSYSTEM
   DATE XX/XX/XX                                  ② XXXXXXXXXXXXXXXXXX VIOLATIONS WARNINGS REPORT                          PAGE ZZZZ9
                PWS-ID        CONTAMINANT-ID                          VIOLATION MESSAGE
               XXXXXXX             XXXX              XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
               XXXXXXX             XXXX              XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


             ① PROGRAM NAME
             ② CONTAMINANT GROUP NAME:
                         TURBIDITY
                         INORGANIC CHEMICAL
                         ORGANIC CHEMICAL
                         BACTERIOLOGICAL
                         GROSS ALPHA
                         GROSS BETA
```

WAQC038 1 OF 1
3/8/77

MERGE COMPLIANCE FILES MODULE

SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER

EXHIBIT WAQC.327

```
                                        MODEL STATE INFORMATION SYSTEM
WAQC038                               WATER QUALITY COMPLIANCE SUBSYSTEM
DATE XX/XX/XX                                 COMPLETION REPORT                                      PAGE ZZZZ9
                                                                                     % RELATIVE TO THE
                                                                           TOTAL    SAMPLE ANALYSIS FILE

            ┌NUMBER OF RECORDS ORIGINALLY ON THE SAMPLE ANALYSIS FILE    ZZZ,ZZZ,ZZ9
            │NUMBER OF NEW RECORDS ADDED TO THE SAMPLE ANALYSIS FILE     ZZZ,ZZZ,ZZ9        ZZ9 %
            │NUMBER OF RECORDS CURRENTLY ON THE SAMPLE ANALYSIS FILE     ZZZ,ZZZ,ZZ9        ZZ9 %
            │
            │
            │NUMBER OF RECORDS CURRENTLY ON THE PERIODIC SAMPLE FILE     ZZZ,ZZZ,ZZ9
        ①  │
            │
            │NUMBER OF RECORDS CURRENTLY ON THE VIF TRANSACTION FILE     ZZZ,ZZZ,ZZ9
            │
            │
            │NUMBER OF RECORDS CURRENTLY ON THE PWF TRANSACTION FILE     ZZZ,ZZZ,ZZ9
            └

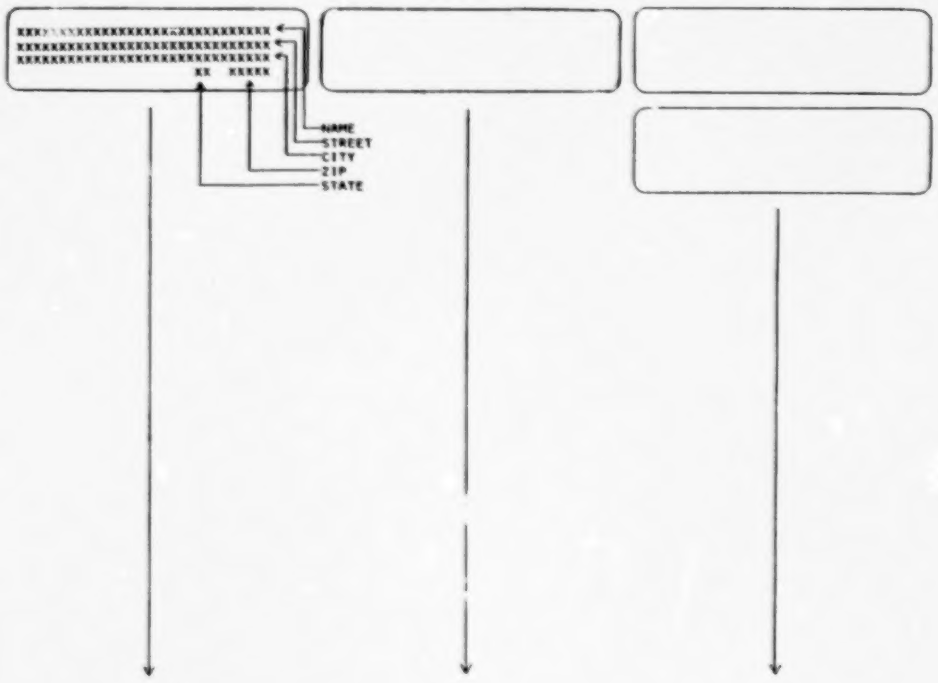
                         ② XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

① -NORMAL COMPLETION REPORT

② -ERROR MESSAGE WHEN WAQC038 IS NOT PROCESSED NORMALLY.

WAQC.[illegible] 1 OF [illegible]
3/24/77

MAILING LABELS AND REPORT CARDS MODULE
SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT WAQC.329


XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXX
NAME
STREET
CITY
ZIP
STATE

```
            .EDR010 AND 020                1 OF 1
                                           1/8/77
BUILD MODIFIED PWF MODULE AND BUILD DVF MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT FEDR.300


XXXXXXX   ①                         MODEL STATE INFORMATION SYSTEM
                                     FEDERAL REPORTING SUBSYSTEM
DATE XX/XX/XX                            COMPLETION REPORT                                PAGE ZZZZ9

                                                                          % RELATIVE TO THE
                                                                 TOTAL    XXXXXXXXXXXXXXXX  ②
                 1. NUMBER OF RECORDS ON THE PUBLIC WATER FILE          ZZZ,ZZZ,ZZ9
          ③
                 2. NUMBER OF RECORDS ON THE MODIFIED PUBLIC WATER FILE  ZZZ,ZZZ,ZZ9       ZZ9 %


                 1. NUMBER OF RECORDS ON THE VIOLATIONS FILE            ZZZ,ZZZ,ZZ9

                 2. NUMBER OF VIOLATION RECORDS ON THE DEVIATIONS FILE  ZZZ,ZZZ,ZZ9       ZZ9 %
          ④
                 3. NUMBER OF VARIANCES AND EXEMPTIONS RECORDS ON THE
                                                      DEVIATIONS FILE  ZZZ,ZZZ,ZZ9

                 4. NUMBER OF RECORDS ON THE DEVIATIONS FILE            ZZZ,ZZZ,ZZ9



          ① - PROGRAM NAME          FEDR010 OR FEDR020

          ② - PERCENT TITLE -  PUBLIC WATER FILE  FOR  FEDR010

                      OR       VIOLATIONS FILE   FOR  FEDR020

          ③ - DETAIL LINES TO BE USED   FOR FEDR010

          ④ - DETAIL LINES TO BE USED   FOR FEDR020
          VARIES                           1 of 1
                                           10/28/76
 This report is produced by any module that needs an Update Statistics Report.
          SouthWestern Ohio Regional Computer Center
EXHIBIT MSIS.300


 XXXXXXX ①                                MODEL STATE INFORMATION SYSTEM
                                        X-----------------------------------X ②
 DATE XX/XX/XX                            STANDARD UPDATE STATISTICS REPORT                    PAGE ZZZZ9

                                                                                % RELATIVE TO THE
                                                                      TOTAL      ORIGINAL FILE
                     1. NUMBER OF RECORDS ORIGINALLY ON THE FILE       ZZZ,ZZZ,ZZ9
                     2. NUMBER OF ACCEPTABLE DATA ENTRY TRANSACTIONS   ZZZ,ZZZ,ZZ9
                     3. NUMBER OF STANDARD ERROR RECORDS CREATED       ZZZ,ZZZ,ZZ9
                     4. NUMBER OF RECORDS MODIFIED ON THE FILE         ZZZ,ZZZ,ZZ9       ZZZ9 %
                     5. NUMBER OF NEW RECORDS ADDED TO THE FILE        ZZZ,ZZZ,ZZ9       ZZZ9 %
                     6. NUMBER OF RECORDS DELETED FROM THE FILE        ZZZ,ZZZ,ZZ9       ZZZ9 %
                     7.  NUMBER OF RECORDS NOW ON THE FILE             ZZZ,ZZZ,ZZ9       ZZZ9 %



      ① PROGRAM NAME

      ② SUBSYSTEM NAME
```

VARIES 1 of 1
10/28/76

This report is produced by any module that needs an Update Statistics Report.

SouthWestern Ohio Regional Computer Center

EXHIBIT MSIS.300

```
XXXXXXX ①                         MODEL STATE INFORMATION SYSTEM
                                X------------------------------------x ②
DATE XX/XX/XX                      STANDARD UPDATE STATISTICS REPORT                          PAGE ZZZZ9

                                                                              % RELATIVE TO THE
                                                                   TOTAL       ORIGINAL FILE
                1. NUMBER OF RECORDS ORIGINALLY ON THE FILE      ZZZ,ZZZ,ZZ9
                2. NUMBER OF ACCEPTABLE DATA ENTRY TRANSACTIONS  ZZZ,ZZZ,ZZ9
                3. NUMBER OF STANDARD ERROR RECORDS CREATED      ZZZ,ZZZ,ZZ9
                4. NUMBER OF RECORDS MODIFIED ON THE FILE        ZZZ,ZZZ,ZZ9       ZZZ9 %
                5. NUMBER OF NEW RECORDS ADDED TO THE FILE       ZZZ,ZZZ,ZZ9       ZZZ9 %
                6. NUMBER OF RECORDS DELETED FROM THE FILE       ZZZ,ZZZ,ZZ9       ZZZ9 %
                7.  NUMBER OF RECORDS NOW ON THE FILE            ZZZ,ZZZ,ZZ9       ZZZ9 %
```

① PROGRAM NAME

② SUBSYSTEM NAME

MSIS020 1 of 1
10/13/76

SHF MAINTENANCE MODULE
SouthWestern Ohio Regional Computer Center

EXHIBIT MSIS.301

```
                                                  MODEL STATE INFORMATION SYSTEM
MSIS020                                            STANDARD PROCESSING SUBSYSTEM

DATE XX/XX/XX                             UPDATE REPORT FOR XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  ①                     PAGE ZZZZ9
                                                     OPTION: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ②

     ID                                      ------ DATA ELEMENT ------
FILE/RECORD LAST UPDATE  CURRENT UPDATE MNEMONIC  CAT NUM  HISTORY            OLD VALUE                       NEW VALUE

 XX  XXXXX   XX/XX/XX       XX/XX/XX   XXXXXXXXXX    XXX      X     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

① X's will be replaced by one of the following:

a. VIOLATIONS FILE
b. VARIANCES AND EXEMPTIONS FILE
c. ENFORCEMENT ACTIONS FILE
d. OPERATOR AND MAILING FILE

② X's will be replaced by one of the following:

a. CURRENT RECORDS UPDATE REPORT
b. CURRENT FILE RECORDS REPORT
c. ENTIRE MSIS HISTORY REPORT
d. NO DETAIL REPORT

```
           MSIS030                            1 of 1
                                              10/15/76
   Standard Tables Creation
              SouthWestern Ohio Regional Computer Center
 EXHIBIT MSIS.302


                                                  MODEL STATE INFORMATION SYSTEM
   MSIS030                                        STANDARD PROCESSING SUBSYSTEM
   DATE XX/XX/XX                                       ERROR MESSAGE TABLE                                  PAGE 88889

                       FILE ID                  ERROR CODE                      ERROR MESSAGE
           * ERROR *      XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
                          XX                        XXX                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

MSIS030 1 of 1
10/15/76

Standard Tables Creation
SouthWestern Ohio Regional Computer Center

EXHIBIT MSIS.303

```
                                        MODEL STATE INFORMATION SYSTEM
MSIS030                                 STANDARD PROCESSING SUBSYSTEM

DATE XX/XX/XX                              CODE VALUE TABLE                                        PAGE ZZZZ9

                  DATA ELEMENT
         FILE ID  CATALOGUE NO   DATA ELEMENT LENGTH   DATA ELEMENT VALUE     DATA ELEMENT DESCRIPTION

* ERROR *  XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           XX         XXX               X                  XXXXXXXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
           MSIS030                            1 OF 1
                                              10/5/76
  STANDARD TABLES CREATION MODULE
           SouthWestern Ohio Regional Computer Center
EXHIBIT MSIS.304


 MSIS030                                     MODEL STATE INFORMATION SYSTEM
                                             STANDARD PFOCESSING SUBSYSTEM
 DATE XX/XX/XX                                  DATA ELEMENT TABLE                                   PAGE ZZZZ9

                                RECORD INFORMATION                              NAME INFORMATION
                                    START POSITION           FIELD LENGTH
           FILE ID  CATALOGUE NO  TRANSACTION / FILE      TRANSACTION / FILE     MNEMONIC NAME          HISTORY CODE

 *ERROR*     XX        XXX          XX       XXXX          XX       XX          XXXXXXXXXX                X
             XX        XXX          XX       XXXX          XX       XX          XXXXXXXXXX                X
             XX        XXX          XX       XXXX          XX       XX          XXXXXXXXXX                X
```

MSIS050 1 of 1
10/15/76

SHF PURGE MODULE
SouthWestern Ohio Regional Computer Center
EXHIBIT MSIS.305

```
                                                   MODEL STATE INFORMATION SYSTEM
MSIS050                                             STANDARD PROCESSING SUBSYSTEM

DATE XX/XX/XX                                      PURGE OF THE STANDARD HISTORY FILE                              PAGE ZZZZ9
                                                         PURGE DATE: XX/XX/XX

    ID                                    ------ DATA ELEMENT ------
FILE/RECORD LAST UPDATE CURRENT UPDATE  MNEMONIC  CATALOGUE NUMBER            OLD VALUE                        NEW VALUE

 XX  XXXXX   XX/XX/XX    XX/XX/XX     XXXXXXXXXX      XXX        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XX  XXXXX   XX/XX/XX    XX/XX/XX     XXXXXXXXXX      XXX        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XX  XXXXX   XX/XX/XX    XX/XX/XX     XXXXXXXXXX      XXX        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

MSIS040 1 OF 1
10/14/76

SHF SELECTION MODULE
SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT MSIS.306

```
                                                  MODEL STATE INFORMATION SYSTEM
XXXXXXX ②                                      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ①
DATE XX/XX/XX                       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ③                    PAGE ZZZZ9

                                                        SORT SEQUENCE

                                                   MNEMONIC NAME    SORT MODE

                                               1.  XXXXXXXXXX          X
                                               2.  XXXXXXXXXX          X
                                                       |               |
                                                       |               |
                                                       |               |
                                                       |               |
                                              10.  XXXXXXXXXX          X

                RELATION SYMBOLS:   LT = LESS THAN         NL = NOT LESS THAN        EQ = EQUALS
                                    GT = GREATER THAN      NG   NOT GREATER THAN     NX = NOT EXISTS (EMPTY)

                                                      SELECTION CRITERIA

       MNEMONIC    SYMBOL          VALUE                      MNEMONIC    SYMBOL           VALUE

  1. XXXXXXXXXX     XX         XXXXXXXXXXXXXXX          AND  XXXXXXXXXX     XX         XXXXXXXXXXXXXXX          AND
     XXXXXXXXXX     XX         XXXXXXXXXXXXXXX          AND  ...

     * RECORDS SELECTED        ZZZ,ZZ9

  2. XXXXXXXXXX     XX         XXXXXXXXXXXXXXX

     * RECORDS SELECTED        ZZZ,ZZ9

    ** TOTAL RECORDS SELECTED  ZZZ,ZZ9                  % OF WHICH WAS SELECTED  ZZ9 %
```

① SUBSYSTEM NAME
② PROGRAM NUMBER
③ REPORT NAME

```
              MSIS040                          1 of 1
                                               10/14/76
     SHF Selection Module
                SouthWestern Ohio Regional Computer Center
    EXHIBIT MSIS.307


                                                   MODEL STATE INFORMATION SYSTEM
     MSIS040
                                                     STANDARD HISTORY PROCESSING
     DATE XX/XX/XX                                SELECTION OF THE STANDARD HISTORY FILE                                   PAGE ZZZZ9

         ID                                  -------DATA ELEMENT ------
     FILE/RECORD LAST UPDATE CURRENT UPDATE  MNEMONIC  CATALOGUE NUMBER              OLD VALUE                          NEW VALUE

      XX ` XXXXX   XX/XX/XX      XX/XX/XX    XXXXXXXXXX      XXX       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

      XX  XXXXX    XX/XX/XX      XX/XX/XX    XXXXXXXXXX      XXX       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
               MSIS010                          1 OF 1
                                                10/28/76
STANDARD ERROR PROCESSING
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT MSIS.309

                                                    MODEL STATE INFORMATION SYSTEM
XXXXXXX ①                                      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ②
DATE XX/XX/XX                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ③                     PAGE ZZZZ9

************************************************************************************************************************************

                          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ④
                                         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ⑤
                                         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ④
                                         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ⑤
                                         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


************************************************************************************************************************************
```

① PROGRAM NAME

② SUBSYSTEM NAME

③ REPORT NAME

④ IMAGES OF RECORDS THAT ARE IN ERROR - PROC, SEL1, SEL2, SORT, ETC.

⑤ ALL ERROR MESSAGES THAT ARE ASSOCIATED WITH EACH RECORD IN ERROR

```
          MSIS030                       1 OF 1
                                        10/5/76
STANDARD TABLES CREATION MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT MSIS.308


MSIS030                                          MODEL STATE INFORMATION SYSTEM
                                                  STANDARD PROCESSING SUBSYSTEM
DATE XX/XX/XX                                         ERROR IN CARD CODE                                        PAGE ZZZZ9

 *ERROR*           XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
                                                  1 of 1
                                                  10/28/76
This report is produced by several modules that require a warning report.
              SouthWestern Ohio Regional Computer Center
EXHIBIT MSIS.310


                                                     MODEL STATE INFORMATION SYSTEM
  xxxxxxx ①                                      xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx ②

  DATE XX/XX/XX                                   ===== STANDARD WARNING REPORT ======                                          PAGE ZZZZ9

                RECORD ID                            DATA ELEMENT NAME                                WARNING MESSAGE

   xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx  xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx  xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

   xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx  xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx  xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

① Program Name

② Subsystem Name

```
           VARIES                            1 of 1
                                             10/14/76
THE REPORT IS PRODUCED BY SEVERAL MODULES THAT REQUIRE A SORT SEQUENCE REPORT.
           SouthWestern Ohio Regional Computer Center
EXHIBIT MSIS.311


                                              MODEL STATE INFORMATION SYSTEM
XXXXXXX ①                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ②
DATE XX/XX/XX                                 STANDARD SORT SEQUENCE REPORT                           PAGE ZZZZ9

                                                    SORT SEQUENCE

                                              MNEMONIC NAME     SORT MODE

                                          1.  XXXXXXXXXX            X
                                          2.  XXXXXXXXXX            X
                                          3.  XXXXXXXXXX            X
                                          4.  XXXXXXXXXX            X
                                          5.  XXXXXXXXXX            X
                                          6.  XXXXXXXXXX            X
                                          7.  XXXXXXXXXX            X
                                          8.  XXXXXXXXXX            X
                                          9.  XXXXXXXXXX            X
                                         10.  XXXXXXXXXX            X



      ① PROGRAM NAME

      ② SUBSYSTEM NAME
```

```
            VARIES                      1 OF 1
                                       10/15/76
THIS REPORT IS PRODUCED BY ANY MODULE THAT NEEDS A SELECTION STATISTICS REPORT.
        SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT MSIS.312


XXXXXXX ①                                MODEL STATE INFORMATION SYSTEM
                                       XXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXX   ②
DATE XX/XX/XX                          STANDARD SELECTION STATISTICS REPORT                        PAGE ZZZZ9

        RELATION SYMBOLS:   LT = LESS THAN          NL = NOT LESS THAN        EQ = EQUALS
                            GT = GREATER THAN       NG = NOT GREATER THAN     NX = NOT EXITS (EMPTY)

                                                  SELECTION CRITERIA

      MNEMONIC   SYMBOL           VALUE                        MNEMONIC   SYMBOL           VALUE

  1. XXXXXXXXXX    XX        XXXXXXXXXXXXXXX          AND  XXXXXXXXXX    XX        XXXXXXXXXXXXXXX          AND
     XXXXXXXXXX    XX        XXXXXXXXXXXXXXX          AND  ...

    * RECORDS SELECTED       ZZZ,ZZ9

  2. XXXXXXXXXX    XX        XXXXXXXXXXXXXXX

    * RECORDS SELECTED       ZZZ,ZZ9

   ** TOTAL RECORDS SELECTED ZZZ,ZZ9                  % OF FILE WHICH WAS SELECTED  ZZ9 %




     ①   PROGRAM NAME

     ②   SUBSYSTEM NAME
```

```
              MSIS010                            1 OF 1
                                                 11/18/76
STANDARD ERROR PROCESSING MODULE
           SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT MSIS.313
```

```
                                                    MODEL STATE INFORMATION SYSTEM
MSIS010                                              STANDARD PROCESSING SUBSYSTEM

DATE XX/XX/XX                                          DATA ENTRY ERROR REPORT                                          PAGE ZZZZ9
                                           FOR SUBSYSTEM:  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  ①


ERROR                                                                                      DATA
NUMBER 2345678901234567890123456789012345678901234567890123456789012345678901234567890   ELEMENT COLUMNS       EXPLANATIONS

 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXX XX-XX XXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

① X'S WILL BE REPLACED BY ONE OF THE FOLLOWING:

A. PUBLIC WATER SYSTEM INVENTORY
B. WATER QUALITY COMPLIANCE
C. REGULATIONS
D. VARIANCES AND EXEMPTIONS
E. ENFORCEMENT ACTIONS
F. OPERATOR AND MAILING
G. STANDARD PROCESSING

② SEE ATTACHED SHEETS FOR ERROR DESCRIPTIONS

```
                 VAEX020                          1 OF 1
                                                 10-18-76
COMPLIANCE  SCHEDULE REPORT MODULE
              SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT VAEX.302

                                                     MODEL STATE INFORMATION SYSTEM
  VAEX020                                          VARIANCES AND EXEMPTIONS SUBSYSTEM
                                                                                                                         PAGE 22229
  DATE XX/XX/XX                                        COMPLIANCE SCHEDULE REPORT
                                                  FOR THE PERIOD XX/XX/XX TO XX/XX/XX

  REGION: XX      DISTRICT: XX                                           VARIANCE/         V/E                 DESCRIPTION
                              PUBLIC WATER SYSTEM                        EXEMPTION        STATUS
  VE-ID     PWS-ID            NAME AND ADDRESS                           XXXXXXXXX          X
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  XXXXX     XXXXXXX         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                                          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                                          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                                                               MILESTONE                 MILESTONE DESCRIPTION
                                                                                   CODE
                                                               REPEATING           XX               XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
            TARGET DATE: XX/XX/XX                                                                   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                                                                   XX               XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
            TARGET DATE: XX/XX/XX                                                                   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                                                                   XX               XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
            TARGET DATE: XX/XX/XX                                                                   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
               VAEX020                           1 OF 1
                                                 1/11/77
COMPLIANCE SCHEDULE REPORT MODULE
           SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT VAEX.303


                                                   MODEL STATE INFORMATION SYSTEM
VAEX020                                          VARIANCES AND EXEMPTIONS SUBSYSTEM

DATE XX/XX/XX                                         COMPLIANCE SCHEDULE REPORT                                        PAGE ZZZZ9
                                                 FOR THE PERIOD XX/XX/XX TO XX/XX/XX


          PWS-ID: XXXXXXX

                                                                              MILESTONE
                                                                                 CODE                   MILESTONE DESCRIPTION

          TARGET DATE: XX/XX/XX                              REPEATING           XX                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


          TARGET DATE: XX/XX/XX                                                  XX                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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```
                VAEX030                             1 OF 1
COMPLIANCE SCHEDULE IN ARREARS REPORT MODULE        1/11/77
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT VAEX.304


VAEX030                                             MODEL STATE INFORMATION SYSTEM
DATE XX/XX/XX                                     VARIANCES AND EXEMPTIONS SUBSYSTEM
                                                     COMPLIANCE IN ARREARS REPORT
REGION: XX       DISTRICT: XX                                                                                             PAGE ZZZZ9

VE-ID     PWS-ID              PUBLIC WATER SYSTEM                        VARIANCE/      V/E
                              NAME AND ADDRESS                           EXEMPTION     STATUS                DESCRIPTION
XXXXX     XXXXXXX       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX                  XXXXXXXXX         X
                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXx                                       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

TARGET DATE      LAG(MONTHS)             DELAY                               MILESTONE
                                          CODE                                CODE                MILESTONE DESCRIPTION
 XX/XX/XX           XX                      X             REPEATING            XX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

 XX/XX/XX           XX                      X                                  XX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

 XX/XX/XX           XX                      X                                  XX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
              VAEX030                      1 OF 1
                                           1/11/77
COMPLIANCE SCHEDULE IN ARREARS REPORT MODULE
           SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT VAEX.305


                                              MODEL STATE INFORMATION SYSTEM
                                           VARIANCES AND EXEMPTIONS SUBSYSTEM
VAEX030
                                             COMPLIANCE IN ARREARS REPORT                              PAGE ZZZZ9
DATE XX/XX/XX


  PWS-ID: XXXXXXX                                                  MILESTONE
                                    DELAY                            CODE              MILESTONE DESCRIPTION
TARGET DATE      LAG(MONTHS)        CODE
  XX/XX/XX           XX              X           REPEATING            XX         XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

  XX/XX/XX           XX              X                                XX         XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX



     *    TOTAL PWS IN ARREARS FOR DISTRICT XX: ZZZZ9

     **   TOTAL PWS IN ARREARS FOR REGION   XX: ZZZZ9

     ***  TOTAL PWS IN ARREARS FOR STATE    XX: ZZZZ9
```

```
                 VAEX041                          1 of 1
                                                  1/11/77
  CONDENSED REPORT MODULE
               SouthWestern Ohio Regional Computer Center
EXHIBIT VAEX.306
```

```
                                                    MODEL STATE INFORMATION SYSTEM
VAEX041                                           VARIANCES AND EXEMPTIONS SUBSYSTEM

DATE XX/XX/XX                                              CONDENSED REPORT                                           PAGE ZZZZ9

 VE    REF  V/E  EFFECTIVE EXPIR.  V/E   CONT            TREATMENT REASON   LAST     NEXT
 ID     ID  TYPE   DATE     DATE  STATUS   ID     MCL       CODE    CODE   UPDATE   TARGET   PWS-ID        PWS NAME

XXXXX XXXXX  X   xx/xx/xx xx/xx/xx   X   XXXX XXXXXXXXXX    XXX      XX   xx/xx/xx xx/xx/xx XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXX XXXXX  X   xx/xx/xx xx/xx/xx   X   XXXX XXXXXXXXXX    XXX      XX   xx/xx/xx xx/xx/xx XXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
                 VAEX050                          1 OF 1
                                                  1/11/77
CASE HISTORY REPORT MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT VAEX.307


                                                  MODEL STATE INFORMATION SYSTEM
VAEX050                                           VARIANCES ANC EXEMPTIONS SUBSYSTEM

DATE XX/XX/XX                                         CASE HISTORY REPORT                                     PAGE ZZZZ9

PWS-ID: XXXXXXX    PWS NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          PHONE: (XXX) XXX-XXXX      REGION: XX     DISTRICT: XX
                   ADDRESS:  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                             XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX

   V & E ID: XXXXX    REFERENCE ID: XXXXX        TYPE OF V & E: X          EFFECTIVE DATE: XX/XX/XX    EXPIRATION DATE: XX/XX/XX

   V & E STATUS: X    TREATMENT INVOLVED: XXX    ALTERNATE TREATMENT: XXX  CONTAMINANT ID: XXXX        MODIFIED MCL:  XXXXXXXXXX

   REASON CODE: XX    MODIFIED FREQUENCY: XXX                                                          LAST UPDATE DATE: XX/XX/XX
                                                DESCRIPTION:     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

  MILESTONE   TARGET     ATTAINED               MILESTONE DESCRIPTION              LAG               DELAY            REPEAT
    CODE       DATE        DATE                                                  (MONTHS)            CODE            (MONTHS)

     XX      XX/XX/XX   XX/XX/XX        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              XX                X                 XX
                                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

     XX      XX/XX/XX   XX/XX/XX        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX              XX                X                 XX
                                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                 VAEX050                        1 OF 1
                                                10-27-76
 CASE HISTORY REPORT MODULE
            SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
 EXHIBIT VAEX.308


                                                    MODEL STATE INFORMATION SYSTEM
VAEX050                                           VARIANCES ANE EXEMPTIONS SUBSYSTEM

DATE XX/XX/XX                                            CASE HISTORY REPORT                                PAGE ZZZZ9

PWS-ID: XXXXXXX

  MILESTONE  TARGET     ACTUAL                  MILESTONE DESCRIPTION           LAG                 DELAY                REPEAT
    CODE      DATE       DATE                                                 (MONTHS)              CODE                (MONTHS)

     XX     XX/XX/XX    XX/XX/XX            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       XX                   X                    XX
                                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                            XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
              ENAC010                     1 OF 1
                                          2/15/77
CASE HISTORY REPORT MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
 EXHIBIT ENAC.300


                                                   MODEL STATE INFORMATION SYSTEM
ENAC010                                            ENFORCEMENT ACTIONS SUBSYSTEM

DATE XX/XX/XX                                   ENFORCEMENT ACTIONS CASE HISTORY REPORT                           PAGE ZZZZ9

       CASE NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     CASE REFERENCE: XXXXXXXXXXXX     REASON FOR REPORTING: XXXXXXXXXXXXXXX

 CASE-ID: XXXXX     ACTION DATE: XX/XX/XX     CASE STATUS: XXXXXX  PWS-ID: XXXXXXX     PWS NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

 DATE OF LAST UPDATE: XX/XX/XX                 LEGAL STATUS: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     PWS STATE: XX

             PLAINTIFF NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       PLAINTIFF TYPE: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

             DEFENDANT NAME: XXXXXX' :XXXXXXXXXXXXXXXXXXXXX       DEFENDANT TYPE: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

 VIOLATIONS INVOLVED:    DATE                TYPE                 CONTAMINANT ID                   ABSTRACT AND REMARKS

                      XX/XX/XX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       XXXX              XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                      XX/XX/XX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       XXXX              XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX




   CONSENT ORDER NUMBER: XXXXXXX  CONSENT DATE: XX/XX/XX              PERMIT NUMBER: XXXXXXX   PERMIT DATE: XX/XX/XX

 MILESTONE HISTORY:              MILESTONE              TARGET DATE    ATTAINED DATE

                      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     XX/XX/XX        XX/XX/XX
                      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     XX/XX/XX        XX/XX/XX
                      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     XX/XX/XX        XX/XX/XX
```

```
           ENAC040                       1 OF 1
                                         2/8/77
CONDENSED REPORT MODULE
        SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT ENAC.301

                                          MODEL STATE INFORMATION SYSTEM
ENAC040                                   ENFORCEMENT ACTIONS SUBSYSTEM

DATE XX/XX/XX                           ENFORCEMENT ACTIONS CONDENSED REPORT                              PAGE ZZZZ9

 CASE       CASE                   CASE                 PLAINTIFF  DEFENDANT   ACTION    CASE    PWS-ID   ****** VIOLATIONS *******
  ID      REFERENCE                TITLE                  TYPE       TYPE       DATE    STATUS              DATE   TYPE  CONTAMINANT
                                                                                              ③
XXXXX  XXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX        X          X      XX/XX/XX  XXXXXX  XXXXXXX  XX/XX/XX  XX      XXXX ①
                                                                                                       XX/XX/XX  XX      XXXX
                                                                                                       XX/XX/XX  XX      XXXX
                                                                                              ③
XXXXX  XXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX        X          X      XX/XX/XX  XXXXXX  XXXXXXX  XX/XX/XX  XX      XXXX
*** NUMBER OF ACTIONS FOR PWS: 99999 ***  ②
```

① THERE MAY BE UP TO TEN VIOLATIONS PER ENFORCEMENT ACTION

② THIS TOTAL IS ONLY CALCULATED AND PRINTED
IF THE MAJOR SORT KEY WAS PWS-ID

③ X'S TO BE REPLACED BY OPEN OR CLOSED

```
          SRVY020                         1 OF 1
                                          4/1/77
     SCHEDULE REPORT MODULE
               SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
   EXHIBIT SRVY.300


                                                MODEL STATE INFORMATION SYSTEM
   SRVY020                                       SANITARY SURVEY SUBSYSTEM                                   PAGE ZZZZ9
                                                      PRIORITY REPORT

      SELECTION WEIGHTS:  PWS TYPE - X.X   POPULATION SERVED - X.X   COMPLIANCE - X.X   LAST SURVEY DATE - X.X   TYPE SOURCE - X.X

                                                                                                VIOLATIONS  LAST
    REGION/                                                                           PWS  POPULATION  IN LAST   SURVEY   TYPE   SELECTION
    DISTRICT     PWS NAME                          ADDRESS                             TYPE   SERVED   TWO YEARS  DATE   SOURCE     KEY

    XX / XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX           X   XXXXXXXXX     XX     XX/XX/XX XXXXXXX   X.XXXX
            PWS-ID: XXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX

    XX / XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX           X   XXXXXXXXX     XX     XX/XX/XX XXXXXXX   X.XXXX
            PWS-ID: XXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX
          SRVY020                      1 OF 1
                                       4/1/77
     SCHEDULE REPORT MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT SRVY.301


  SRVY020                                     MODEL STATE INFORMATION SYSTEM
                                                SANITARY SURVEY SUBSYSTEM
                                                     SCHEDULE REPORT                                      PAGE 22229

                                     FROM XX/XX/XX   TO XX/XX/XX      SURVEYING CAPACITY: XXXX

   SELECTION WEIGHTS:  PWS TYPE - X.X   POPULATION SERVED - X.X   COMPLIANCE - X.X   LAST SURVEY DATE - X.X   TYPE SOURCE - X.X

                                                                                     VIOLATIONS  LAST
 REGION/                                                                 PWS  POPULATION  IN LAST   SURVEY   TYPE   SELECTION
 DISTRICT      PWS NAME                       ADDRESS                    TYPE   SERVED   TWO YEARS   DATE   SOURCE     KEY

 XX / XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          X   XXXXXXXXX     XX     XX/XX/XX XXXXXXX   X.XXXX
         PWS-ID: XXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX

 XX / XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX          X   XXXXXXXXX     XX     XX/XX/XX XXXXXXX   X.XXXX
         PWS-ID: XXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXX
```

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                 OPER030                          1 of 1
                                                  11/15/76
 Operator Report Program
             SouthWestern Ohio Regional Computer Center
EXHIBIT OPER.300


OPER030                                        MODEL STATE INFORMATION SYSTEM
DATE XX/XX/XX
                                               OPERATOR AND MAILING SUBSYSTEM                                PAGE ZZZZ9
                                                 XXXXXXXXXXXXXXXXXXXXXXXX   ①

  ID      NAME                           STREET
                                         CITY            STATE  ZIP  CERTIFICATE  PWS       CLASS       RENEWAL  XXXXXXX ②
                                                                       NUMBER     ID     A B C D E F     DATE    XXXXXXX ③
XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      PHONE: (XXX) XXX-XXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX   XXXXX   XXXXXXX   XXXXXXX  X X X X X X XX/XX/XX XXXXXXXXXX

XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      PHONE: (XXX) XXX-XXXX          XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX   XXXXX   XXXXXXX   XXXXXXX  X X X X X X XX/XX/XX XXXXXXXXXX
                                                                                                                    ↑
                                                                                                               [INCOMPLETE]
                                                                                                               [NEW       ]
                                                                                                               [DELETION  ]

                                                                                              ① REPORT TITLE
                                                                                              ② LISTING REASON FIELD - HEADER1
                                                                                              ③ LISTING REASON FIELD - HEADER2
```

```
        OPER030                        1 of 1
                                       1/12/77
OPERATOR REPORT MODULE
        SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT OPER.301


                                          MODEL STATE INFORMATION SYSTEM
OPER030
DATE XX/XX/XX                             OPERATOR AND MAILING SUBSYSTEM                               PAGE ZZZZ9
                                            XXXXXXXXXXXXXXXXXXXXXXXXXX  ①

 ID      NAME                         STREET
                                       CITY                 STATE  ZIP  CERTIFICATE  PWS      CLASS     RENEWAL  XXXXXXX ②
                                                                          NUMBER     ID    A B C D E F   DATE    XXXXXXX ③
XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      PHONE: (XXX) XXX-XXXX         XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX  XXXXX  XXXXXXX  XXXXXXX  X X X X X X  XX/XX/XX

XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      PHONE: (XXX) XXX-XXXX         XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX  XXXXX  XXXXXX   XXXXXXX  X X X X X X  XX/XX/XX


                                                                             ① REPORT TITLE
                                                                             ② LISTING REASON FIELD - HEADER1
                                                                             ③ LISTING REASON FIELD - HEADER2
```

OPER080 1 OF 1
1/12/77

DISTRIBUTION REPORT MODULE
SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER

EXHIBIT OPER.302

```
OPER080                                   MODEL STATE INFORMATION SYSTEM
DATE XX/XX/XX
                                          OPERATOR AND MAILING SUBSYSTEM                         PAGE ZZZZ9
                                           MAILING  DISTRIBUTION REPORT

          ID  TYPE       NAME                                 STREET
                                                               CITY                   STATE  ZIP

        XXXXX  X   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                   PHONE: (XXX) XXX-XXXX           XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX   XXXXX

        XXXXX  X   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                   PHONE: (XXX) XXX-XXXX           XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX   XXXXX
          OPER040                         1 OF 1
                                          1/12/77
DISTRIBUTION REPORT MODULE
          SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT OPER.303
```

```
OPER040                                  MODEL STATE INFORMATION SYSTEM
DATE XX/XX/XX
                                         OPERATOR AND MAILING SUBSYSTEM
                                           XXXXXXXXXXXXXXXXXXXXXXXXX ①                              PAGE ZZZZ9

           ID  TYPE        NAME                            STREET                                  XXXXXXX ②
                                                            CITY                    STATE  ZIP     XXXXXXX ③

          XXXXX  X   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                     PHONE: (XXX) XXX-XXXX           XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX    XXXXX  XXXXXXXXXX

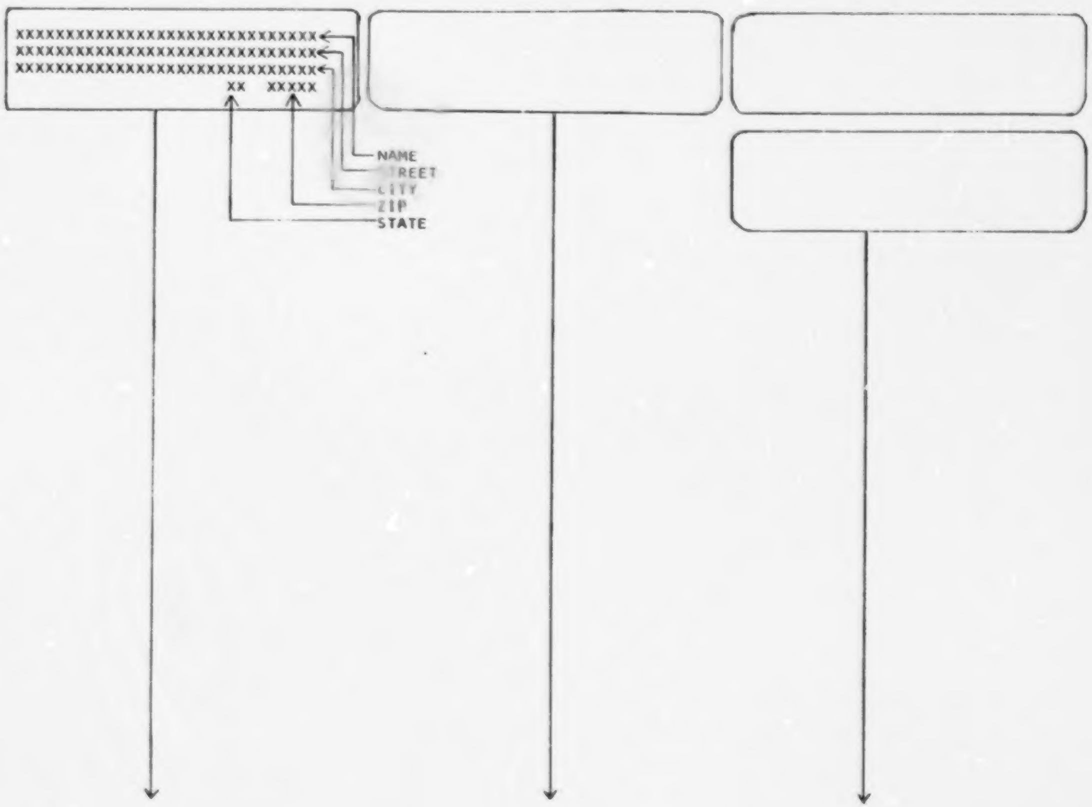
          XXXXX  X   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                     PHONE: (XXX) XXX-XXXX           XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XX    XXXXX  XXXXXXXXXX

                                                                                                [INCOMPLETE]
                                                                                                [NEW       ]
                                                                                                [DELETION  ]

                                                                       ① REPORT TITLE
                                                                       ② LISTING REASON FIELD - HEADER 1
                                                                       ③ LISTING REASON FIELD - HEADER 2
```

OPER050 1 OF 1
1/12/77

MAILING LABEL MODULE
SOUTHWESTERN OHIO REGIONAL COMPUTER CENTER
EXHIBIT OPER.304


XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXX
NAME
STREET
CITY
ZIP
STATE

```
                              MODEL STATE INFORMATION SYSTEM
MSI3030                       STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                      ERROR ME.SAGE TABLE                             PAGE     1

          FILE ID            ERROR CODE                ERROR MESSAGE

            MS                  001             REJECT=INVALID RECORD=ID
            MS                  002             REJECT=RECORD ALREADY EXISTS
            MS                  003             REJECT=NO MATCHING RECORD=ID
            MS                  004             REJECT=RECORD IS INCOMPLETE
            MS                  005             REJECT=CONTAM ID INVALID
            MS                  006             REJECT=STATE VALUE TOO LOW
            MS                  007             REJECT=STATE VALUE TOO HIGH
            MS                  008             REJECT=FED, RECORD MISSING
            MS                  009             REJECT=REC, HAS INVALID DATA
            MS                  010             REJECT=NOT NUMERIC
            MS                  011             REJECT=VALUE UNNACCEPTABLE
            MS                  012             REJECT=VALUE TOO HIGH
            MS                  013             REJECT=VALUE TOO LOW
            MS                  014             REJECT=NOT IN CODE TABLE
            MS                  015             REJECT=PWS ID INVALID
            MS                  016             REJECT=LAB NOT AUTHORIZED
            MS                  017             REJECT=INVALID TRANSACT CODE
            MS                  018             REJECT=REQUIRED DATA MISSING
            MS                  019             REJECT=NO MATCHING MILESTONE
            MS                  020             REJECT=INVALID DELETE CODE
            MS                  021             REJECT=INVALID CREATE CODE
            MS                  022             REJECT=TOO MANY VIOLATIONS
            MS                  023             REJECT=NO MATCHING VIOLATION
            MS                  024             REJECT=INVALID REQUEST CODE
            MS                  025             REJECT=TOO MANY MILESTONES
            MS                  026             REJECT=INVALID OCCURRENCE
            MS                  027             REJECT=METHOD NOT ON TABLE
            MS                  028             REJECT=DUPLICATE MILESTONE
            MS                  029             REJECT=ILLEGAL DELETION
            MS                  030             REJECT=ASSOC VALUE MISSING
            MS                  031             REJECT=TOO MANY CONTAMINANTS
            MS                  032             REJECT=NO MATCHING CONTAMNT
            MS                  033             REJECT=INVALID DATE
            MS                  034             REJECT=DUPLICATE LAB ID
            MS                  101             WARNING=CHECK ELEMENT VALUE
            MS                  102             WARNING=ELEMENT EXCEEDS MAX
            MS                  103             WARNING=ELEMENT BELOW MIN
            MS                  104             WARNING=NOT IN CODE TABLE
            MS                  105             WARNING=NOT IN DATA ELE TBL
            MS                  106             WARNING=DEFAULT VALUE USED
            MS                  107             WARNING=NOT NUMERIC
            MS                  108             WARNING=VALUE TOO LOW
            MS                  401             INVALID=NOT NUMERIC
            MS                  402             INVALID=NOT IN CODE TABLE
            MS                  403             INVALID=NOT A VALID DATE
            MS                  404             INVALID=ELEMENT EXCEEDS MAX
            MS                  405             INVALID=ELEMENT BELOW MIN
            MS                  406             INVALID=ELEMENT MISSING
            MS                  407             INVALID=VALUE UNNACCEPTABLE
            MS                  408             INVALID=NOT ALPHABETIC
```

Reproduced from
best available copy.

```
                                    MODEL STATE INFORMATION SYSTEM
MSIS030                             STANDARD PROCESSING SUBSYSTEM

DATE 05/11/77                           ERROR MESSAGE TABLE                                 PAGE     2

                FILE ID            ERROR CODE                  ERROR MESSAGE

                  MS                   409            INVALID-NOT ON PUB WATER TBL
                  MS                   410            INVALID-ASSOC VALUE MISSING
                  MS                   411            INVALID-CANNOT ACCESS LST
                  MS
```

```
                                          MODEL STATE INFORMATION SYSTEM
MSI8030                                   STANDARD PROCESSING SUBSYSTEM                                          PAGE     1
DATE 05/11/77                                     CODE VALUE TABLE

                    DATA ELEMENT                                                                        DATA ELEMENT DESCRIPTION
      FILE ID       CATALOGUE NO       DATA ELEMENT LENGTH       DATA ELEMENT VALUE

        EA              435                     1                        A                      MUNICIPAL AUTHORITY
        EA              435                     1                        C                      CONSERVATION ORGANIZATION
        EA              435                     1                        F                      FEDERAL GOVERNMENT
        EA              435                     1                        G                      GROUP ACTION
        EA              435                     1                        I                      INDUSTRIAL ORGANIZATION
        EA              435                     1                        M                      MUNICIPAL GOVERNMENT
        EA              435                     1                        N                      COUNTY GOVERNMENT
        EA              435                     1                        O                      OTHER ORGANIZATION
        EA              435                     1                        P                      PRIVATE CITIZEN
        EA              435                     1                        S                      STATE GOVERNMENT
        EA              435                     1                        W                      WATER SUPPLY OWNER
        EA              435                     1                        0                      OTHER ORGANIZATION
        EA              435                     1                        1                      INDUSTRIAL ORGANIZATION
        EA              437                     1                        F                      FEDERAL POLLUTION SOURCE
        EA              437                     1                        I                      INDUSTRIAL POLLUTION SOURCE
        EA              437                     1                        M                      MUNICIPAL POLLUTION SOURCE
        EA              437                     1                        N                      COUNTY POLLUTION SOURCE
        EA              437                     1                        O                      OTHER POLLUTION SOURCE
        EA              437                     1                        P                      PRIVATE CITIZEN
        EA              437                     1                        S                      STATE POLLUTION SOURCE
        EA              437                     1                        W                      WATER SUPPLY OWNER
        EA              437                     1                        0                      OTHER POLLUTION SOURCE
        EA              437                     1                        1                      INDUSTRIAL POLLUTION SOURCE
        EA              449                     1                        A                      PRELIMINARY MOTIONS FILED
        EA              449                     1                        B                      SUMMARY MOTION FILED
        EA              449                     1                        C                      ORDER,INJUNCTION,TRO FINAL
        EA              449                     1                        D                      JUDGEMENT
        EA              449                     1                        E                      PENALTY
        EA              449                     1                        F                      CONSENT AGREEMENT SIGNED
        EA              449                     1                        G                      POST TRIAL MOTIONS FILED
        EA              449                     1                        H                      NOTICE OF APPEAL
        EA              449                     1                        I                      CIVIL ACTION
        EA              449                     1                        J                      STAY PENDING APPEAL
        EA              449                     1                        K                      APPEAL PENDING
        EA              449                     1                        L                      APPEAL RESOLVED
        EA              449                     1                        M                      COMPLIANCE ACHIEVED
        EA              449                     1                        N                      COMPLAINT FILED
        EA              449                     1                        O                      OTHER
        EA              449                     1                        Z                      PENDING DELETION
        EA              449                     1                        0                      OTHER
        EA              449                     1                        1                      CIVIL ACTION
        EA              449                     1                        2                      COMPLAINT FILED
        EA              449                     1                        3                      BRIEFS FILED
        EA              449                     1                        4                      PRETRIAL HELD
        EA              449                     1                        5                      HEARING SCHEDULED
        EA              449                     1                        6                      HEARING HELD
        EA              449                     1                        7                      ORAL ARGUMENTS HEARD
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MSI8030                                    MODEL STATE INFORMATION SYSTEM
                                           STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                                    CODE VALUE TABLE                                          PAGE     2

                    DATA ELEMENT
         FILE ID    CATALOGUE NO      DATA ELEMENT LENGTH     DATA ELEMENT VALUE          DATA ELEMENT DESCRIPTION

           EA           449                    1                      8                 INJUCTION REQUESTED
           EA           449                    1                      9                 TRO REQUESTED
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                                          MODEL STATE INFORMATION
HBI8030                                   STANDARD PROCESSING SUBSYSTEM                                          PAGE    1

DATE 05/11/77                                   CODE VALUE TABLE

                    DATA ELEMENT                                                              DATA ELEMENT DESCRIPTION
         FILE ID    CATALOGUE NO    DATA ELEMENT LENGTH    DATA ELEMENT VALUE

           LB           321                1                    C                  COMMERCIAL
           LB           321                1                    D                  DAIRY
           LB           321                1                    F                  FEDERAL INSTALLATION
           LB           321                1                    G                  FEDERAL OTHER
           LB           321                1                    H                  HEALTH FACILITY
           LB           321                1                    I                  INDIAN  RESERVATION
           LB           321                1                    L                  LOCAL
           LB           321                1                    O                  OTHER
           LB           321                1                    P                  PRIVATE
           LB           321                1                    S                  STATE
           LB           321                1                    U                  UNIVERSITY
           LB           321                1                    W                  PUBLIC WATER SUPPLY
           LB           321                1                    0                  OTHER
           LB           321                1                    1                  INDIAN  RESERVATION
           LB           820                3                    001                NEPHELOMETRIC
           LB           820                3                    101                ATOMIC ABSORPTIUM
           LB           820                3                    103                FLAMELESS ATOMIC ABSORPTION
           LB           820                3                    105                BRUCINE COLORIMETRIC
           LB           820                3                    107                ELECTRODE
           LB           820                3                    109                CADMIUM REDUCTION
           LB           820                3                    111                COLORIMETRIC,PRELIM DISTILL.
           LB           820                3                    201                ORGANOCHLORINE PESTICIDES
           LB           820                3                    203                CHLORINATED PHENOXY&HERBICIDES
           LB           820                3                    301                DPN - CHLORINE RESIDUAL
           LB           820                3                    303                MEMBRANE FILTER
           LB           820                3                    305                FERMENTATION TUBE - 10 ML
           LB           820                3                    307                FERMENTATION TUBE - 100 ML
           LB           820                3                    401                GROSS ALPHA & BETA, METHOD 302
           LB           820                3                    403                STRONTIUM-89,90, METHOD 303
           LB           820                3                    405                TOTAL RADIUM, METHOD 304
           LB           820                3                    407                RADIUM-226, METHOD 305
           LB           820                3                    409                TRITIUM, METHOD 306
           LB           820                3                    411                CESIUM-134, ASTM D-2459
           LB           820                3                    413                URANIUM, ASTM D-2907
           LB           820                3                    999                OTHER
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                                   MODEL STATE INFORMATION SYSTEM
MSI8030                            STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                             CODE VALUE TABLE                                  PAGE     1

                   DATA ELEMENT
         FILE ID   CATALOGUE NO    DATA ELEMENT LENGTH    DATA ELEMENT VALUE        DATA ELEMENT DESCRIPTION

           MS          001                 4                     0100               TURBIDITY
           MS          001                 4                     1005               ARSENIC
           MS          001                 4                     1010               BARIUM
           MS          001                 4                     1015               CADMIUM
           MS          001                 4                     1020               CHROMIUM
           MS          001                 4                     1025               FLUORIDE
           MS          001                 4                     1030               LEAD
           MS          001                 4                     1035               MERCURY
           MS          001                 4                     1040               NITRATE (AS N)
           MS          001                 4                     1045               SELENIUM
           MS          001                 4                     1050               SILVER
           MS          001                 4                     1055               ADDL CHEM 1
           MS          001                 4                     1060               ADDL CHEM 2
           MS          001                 4                     2005               ENDRIN
           MS          001                 4                     2010               LINDANE
           MS          001                 4                     2015               METHOXYCHLOR
           MS          001                 4                     2020               TOXAPHENE
           MS          001                 4                     2035               ADDL CHEM 3
           MS          001                 4                     2040               ADDL CHEM 4
           MS          001                 4                     2105               2,4 - D
           MS          001                 4                     2110               2,4,5 - TP SILVEX
           MS          001                 4                     3000               COLIFORM
           MS          001                 4                     4000               GROSS ALPHA PARTICLE ACTIVITY
           MS          001                 4                     4010               COMBINED RADIUM
           MS          001                 4                     4020               RADIUM-226
           MS          001                 4                     4030               RADIUM-228
           MS          001                 4                     4100               GROSS BETA PARTICLE ACTIVITY
           MS          001                 4                     4102               TRITIUM
           MS          001                 4                     4128               23-VANADIUM-48
           MS          001                 4                     4136               26-IRON-59
           MS          001                 4                     4142               27-COBALT-60
           MS          001                 4                     4146               28-NICKEL-63
           MS          001                 4                     4172               38-STRONTIUM-89
           MS          001                 4                     4174               38-STRONTIUM-90
           MS          001                 4                     4176               39-YTTRIUM-90
           MS          001                 4                     4178               39-YTTRIUM-91
           MS          001                 4                     4184               40-ZIRCONIUM-95
           MS          001                 4                     4188               41-NIOBIUM-95
           MS          001                 4                     4200               43-TECHNETIUM-99
           MS          001                 4                     4206               44-RUTHENIUM-103
           MS          001                 4                     4208               44-RUTHENIUM-106
           MS          001                 4                     4220               47-SILVER-110
           MS          001                 4                     4262               53-IODINE-129
           MS          001                 4                     4264               53-IODINE-131
           MS          001                 4                     4270               55-CESIUM-134
           MS          001                 4                     4306               63-EUROPIUM-154
           MS          002                 1                     0                  OTHER
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                                         MODEL STATE INFORMATION SYSTEM
MSI8030                                  STANDARD PROCESSING SUBSYSTEM
                                                                                               PAGE    2
DATE 05/11/77                                   CODE VALUE TABLE

                    DATA ELEMENT                                                          DATA ELEMENT DESCRIPTION
        FILE ID     CATALOGUE NO     DATA ELEMENT LENGTH     DATA ELEMENT VALUE

          MS            082                  1                      R             REACTOR FACILITY
          MS            082                  1                      W             WASTE STORAGE/REPROCESSING
          MS            082                  1                      O             OTHER
          MS            149                  2                      AK            ALASKA
          MS            149                  2                      AL            ALABAMA
          MS            149                  2                      AR            ARKANSAS
          MS            149                  2                      AS            AMERICAN SAMOA
          MS            149                  2                      AZ            ARIZONA
          MS            149                  2                      CA            CALIFORNIA
          MS            149                  2                      CO            COLORADO
          MS            149                  2                      CT            CONNECTICUT
          MS            149                  2                      DC            DISTRICT OF COLUMBIA
          MS            149                  2                      DE            DELAWARE
          MS            149                  2                      FL            FLORIDA
          MS            149                  2                      GA            GEORGIA
          MS            149                  2                      GU            GUAM
          MS            149                  2                      HI            HAWAII
          MS            149                  2                      IA            IOWA
          MS            149                  2                      ID            IDAHO
          MS            149                  2                      IL            ILLINOIS
          MS            149                  2                      IN            INDIANA
          MS            149                  2                      KS            KANSAS
          MS            149                  2                      KY            KENTUCKY
          MS            149                  2                      LA            LOUISIANA
          MS            149                  2                      MA            MASSACHUSETTS
          MS            149                  2                      MD            MARYLAND
          MS            149                  2                      ME            MAINE
          MS            149                  2                      MI            MICHIGAN
          MS            149                  2                      MN            MINNESOTA
          MS            149                  2                      MO            MISSOURI
          MS            149                  2                      MS            MISSISSIPPI
          MS            149                  2                      MT            MONTANA
          MS            149                  2                      NC            NORTH CAROLINA
          MS            149                  2                      ND            NORTH DAKOTA
          MS            149                  2                      NE            NEBRASKA
          MS            149                  2                      NH            NEW HAMPSHIRE
          MS            149                  2                      NJ            NEW JERSEY
          MS            149                  2                      NM            NEW MEXICO
          MS            149                  2                      NV            NEVADA
          MS            149                  2                      NY            NEW YORK
          MS            149                  2                      OH            OHIO
          MS            149                  2                      OK            OKLAHOMA
          MS            149                  2                      OR            OREGON
          MS            149                  2                      PA            PENNSYLVANIA
          MS            149                  2                      PR            PUERTO RICO
          MS            149                  2                      RI            RHODE ISLAND
          MS            149                  2                      SC            SOUTH CAROLINA
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MSIS030                                      MODEL STATE INFORMATION SYSTEM
                                             STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                                       CODE VALUE TABLE                                               PAGE     3

                         DATA ELEMENT
            FILE ID      CATALOGUE NO      DATA ELEMENT LENGTH      DATA ELEMENT VALUE          DATA ELEMENT DESCRIPTION

              MS             149                   2                       SD                   SOUTH DAKOTA
              MS             149                   2                       TN                   TENNESSEE
              MS             149                   2                       TT                   TRUST TERRITORIES
              MS             149                   2                       TX                   TEXAS
              MS             149                   2                       UT                   UTAH
              MS             149                   2                       VA                   VIRGINIA
              MS             149                   2                       VI                   VIRGIN ISLANDS
              MS             149                   2                       VT                   VERMONT
              MS             149                   2                       WA                   WASHINGTON
              MS             149                   2                       WI                   WISCONSIN
              MS             149                   2                       WV                   WEST VIRGINIA '
              MS             149                   2                       WY                   WYOMING
              MS             149                   2                       01                   EPA REGION I - BOSTON
              MS             149                   2                       02                   EPA REGION II - NEW YORK
              MS             149                   2                       03                   EPA REGION III - PHILADELPHIA
              MS             149                   2                       04                   EPA REGION IV - ATLANTA
              MS             149                   2                       05                   EPA REGION V - CHICAGO
              MS             149                   2                       06                   EPA REGION VI - DALLAS
              MS             149                   2                       07                   EPA REGION VII - KANSAS CITY
              MS             149                   2                       08                   EPA REGION VIII - DENVER
              MS             149                   2                       09                   EPA REGION IX - SAN FRANCISCO
              MS             149                   2                       10                   EPA REGION X - SEATTLE
              MS             343                   2                       01                   SINGLE SAMPLE MCL
              MS             343                   2                       02                   AVERAGE MCL
              MS             343                   2                       03                   REGULAR SAMPLING
              MS             343                   2                       04                   CHECK (REPEAT) SAMPLING
              MS             343                   2                       05                   STATE NOTIFICATION
              MS             343                   2                       06                   PUBLIC NOTIFICATION
              MS             343                   2                       07                   TREATMENT TECHNIQUES
              MS             343                   2                       08                   V OR E COMPLIANCE SCHEDULE
              MS             343                   2                       09                   RECORD KEEPING
              MS             343                   2                       10                   OPERATIONS REPORT
              MS             454                   2                       01                   LETTER TO PWS FROM STATE WSP
              MS             454                   2                       04                   ADM.HEARING - PWS & STATE WSP
              MS             454                   2                       07                   OTHER STATE ADM.PROCEDURE
              MS             454                   2                       10                   INJUNCTION SOUGHT
              MS             454                   2                       13                   FINE LEVIED ON PWS
              MS             454                   2                       16                   OTHER CIVIL ACTION
              MS             454                   2                       19                   EXPLORE ALT. SOURCES OF WATER
              MS             454                   2                       22                   EXPLORE REGIONAL SYS. DEVELOP
              MS             454                   2                       25                   FINANCIAL AID OBTAINED
              MS             454                   2                       28                   TREATMENT SYSTEM DESIGNED
              MS             454                   2                       31                   TREATMENT SYSTEM APPROVED
              MS             454                   2                       34                   TREATMENT SYSTEM BUILT
              MS             454                   2                       37                   PERIODIC MONITORING REQ'D.
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MSI3030                                      MODEL STATE INFORMATION SYSTEM
                                             STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77
                                                   CODE VALUE TABLE                                        PAGE     1

                     DATA ELEMENT
          FILE ID    CATALOGUE NO      DATA ELEMENT LENGTH      DATA ELEMENT VALUE        DATA ELEMENT DESCRIPTION
            OH           479                    1                        L                LABORATORY OWNER
            OH           479                    1                        O                OPERATOR
            OH           479                    1                        P                WATER PURVEYOR
            OH           479                    1                        S                SANITARY ENGINEER
            OH           479                    1                        W                WATER SUPPLY OWNER
            OH           479                    1                        X                OTHER
            OH           479                    1                        O                OPERATOR
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MSIS030                              MODEL STATE INFORMATION SYSTEM
                                     STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                               CODE VALUE TABLE                                   PAGE     1

                      DATA ELEMENT
           FILE ID    CATALOGUE NO     DATA ELEMENT LENGTH    DATA ELEMENT VALUE        DATA ELEMENT DESCRIPTION

             PW           159                  3                     001                ADAMS
             PW           159                  3                     003                ALEXANDER
             PW           159                  3                     005                BOND
             PW           159                  3                     007                BOONE
             PW           159                  3                     009                BROWN
             PW           159                  3                     011                BUREAU
             PW           159                  3                     013                CALHOUN
             PW           159                  3                     015                CARROLL
             PW           159                  3                     017                CASS
             PW           159                  3                     019                CHAMPAIGN
             PW           159                  3                     021                CHRISTIAN
             PW           159                  3                     023                CLARK
             PW           159                  3                     025                CLAY
             PW           159                  3                     027                CLINTON
             PW           159                  3                     029                COLES
             PW           159                  3                     031                COOK
             PW           159                  3                     033                CRAWFORD
             PW           159                  3                     035                CUMBERLAND
             PW           159                  3                     037                DE KALB
             PW           159                  3                     039                DE WITT
             PW           159                  3                     041                DOUGLAS
             PW           159                  3                     043                DE PAGE
             PW           159                  3                     045                EDGAR
             PW           159                  3                     047                EDWARDS
             PW           159                  3                     049                EFFINGHAM
             PW           159                  3                     051                FAYETTE
             PW           159                  3                     053                FORD
             PW           159                  3                     055                FRANKLIN
             PW           159                  3                     057                FULTON
             PW           159                  3                     059                GALLATIN
             PW           159                  3                     061                GREENE
             PW           159                  3                     063                GRUNDY
             PW           159                  3                     065                HAMILTON
             PW           159                  3                     067                HANCOCK
             PW           159                  3                     069                HARDIN
             PW           159                  3                     071                HENDERSON
             PW           159                  3                     073                HENRY
             PW           159                  3                     075                IROQUOIS
             PW           159                  3                     077                JACKSON
             PW           159                  3                     079                JASPER
             PW           159                  3                     081                JEFFERSON
             PW           159                  3                     083                JERSEY
             PW           159                  3                     085                JO DAVIESS
             PW           159                  3                     087                JOHNSON
             PW           159                  3                     089                KANE
             PW           159                  3                     091                KANKAKEE
             PW           159                  3                     093                KENDALL
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MBI0030

DATE 05/11/77

MOD . BY FE [illegible] SY
STANDARD PROCESSING [illegible] SYSTEM

CODE VALUE TABLE

FILE ID	DATA ELEMENT CATALOGUE NO	DATA ELEMENT LENGTH	DATA ELEMENT VALUE	DATA ELEMENT DESCRIPTION
PW	159	3	095	KNOX
PW	159	3	097	LAKE
PW	159	3	099	LA SALLE
PW	159	3	101	LAWRENCE
PW	159	3	103	LEE
PW	159	3	105	LIVINGSTON
PW	159	3	107	LOGAN
PW	159	3	109	MCDONOUGH
PW	159	3	111	MCHENRY
PW	159	3	113	MCLEAN
PW	159	3	115	MACON
PW	159	3	117	MACOUPIN
PW	159	3	119	MADISON
PW	159	3	121	MARION
PW	159	3	123	MARSHALL
PW	159	3	125	MASON
PW	159	3	127	MASSAC
PW	159	3	129	MENARD
PW	159	3	131	MERCER
PW	159	3	133	MONROE
PW	159	3	135	MONTGOMERY
PW	159	3	137	MORGAN
PW	159	3	139	MOULTRIE
PW	159	3	141	OGLE
PW	159	3	143	PEORIA
PW	159	3	145	PERRY
PW	159	3	147	PIATT
PW	159	3	149	PIKE
PW	159	3	151	POPE
PW	159	3	153	PULASKI
PW	159	3	155	PUTNAM
PW	159	3	157	RANDOLPH
PW	159	3	159	RICHLAND
PW	159	3	161	ROCK ISLAND
PW	159	3	163	ST CLAIR
PW	159	3	165	SALINE
PW	159	3	167	SANGAMON
PW	159	3	169	SCHUYLER
PW	159	3	171	SCOTT
PW	159	3	173	SHELBY
PW	159	3	175	STARK
PW	159	3	177	STEPHENSON
PW	159	3	179	TAZEWELL
PW	159	3	181	UNION
PW	159	3	183	VERMILLION
PW	159	3	185	WABASH
PW	159	3	187	WARREN

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MSI3030                                              MODEL STATE INFORMATION SYSTEM
                                                     STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                                               CODE VALUE TABLE                                          PAGE     3

                      DATA ELEMENT
         FILE ID      CATALOGUE NO      DATA ELEMENT LENGTH      DATA ELEMENT VALUE          DATA ELEMENT DESCRIPTION

           PW             159                    3                      189                  WASHINGTON
           PW             159                    3                      191                  WAYNE
           PW             159                    3                      193                  WHITE
           PW             159                    3                      195                  WHITESIDE
           PW             159                    3                      197                  WILL
           PW             159                    3                      199                  WILLIAMSON
           PW             159                    3                      201                  WINNEBAGO
           PW             159                    3                      203                  WOODFORD
           PW             160                    3                      017                  CANADIAN INDIAN
           PW             160                    3                      018                  CAYUGA
           PW             160                    3                      019                  CAYUGA-SENECA
           PW             160                    3                      020                  CONFEDERATED TRIBES CHEHALIS
           PW             160                    3                      027                  CHICKASAW
           PW             160                    3                      032                  CHOCTAW
           PW             160                    3                      037                  COEUR D'ALENE
           PW             160                    3                      042                  CREE
           PW             160                    3                      043                  CREEK
           PW             160                    3                      044                  CROW
           PW             160                    3                      076                  MIAMI
           PW             160                    3                      078                  MISSOURI
           PW             160                    3                      079                  MISSOURI-OTOE
           PW             160                    3                      091                  OSAGE
           PW             160                    3                      093                  OTTAWA
           PW             160                    3                      097                  PAWNEE
           PW             160                    3                      103                  POTAWATOMIE
           PW             160                    3                      140                  SHAWNEE
           PW             160                    3                      142                  EASTERN SHAWNEE
           PW             160                    3                      171                  WINNEBAGO
           PW             196                    1                      A                    SYSTEM ABANDONED
           PW             196                    1                      D                    DUPLICATE PWS WITH ANOTHER ID
           PW             196                    1                      M                    SYSTEM MERGED/CONSOLIDATED
           PW             196                    1                      O                    OTHER
           PW             196                    1                      P                    SYSTEM PURGED FROM INVENTORY
           PW             196                    1                      R                    PWS REENTERED WITH NEW ID
           PW             196                    1                      S                    SYSTEM DISCONTINUED
           PW             196                    1                      0                    OTHER
           PW             200                    2                      01                   REGION 1  = ROCKFORD
           PW             200                    2                      02                   REGION 2  = AURORA
           PW             200                    2                      03                   REGION 3  = SPRINGFIELD
           PW             200                    2                      04                   REGION 4  = COLLINSVILLE
           PW             200                    2                      05                   REGION 5  = MARION
           PW             200                    2                      3A                   REGION 3A = CHAMPAIGN
           PW             201                    2                      01                   DISTRICT 1
           PW             201                    2                      02                   DISTRICT 2
           PW             201                    2                      03                   DISTRICT 3
           PW             201                    2                      04                   DISTRICT 4
           PW             201                    2                      05                   DISTRICT 5
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MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

CODE VALUE TABLE

FILE ID	DATA ELEMENT CATALOGUE NO	DATA ELEMENT LENGTH	DATA ELEMENT VALUE	DATA ELEMENT DESCRIPTION
PW	201	2	06	DISTRICT 6
PW	237	1	A	AUTHORITY/COMMISION/DISTRICT
PW	237	1	C	CITY
PW	237	1	F	FEDERAL
PW	237	1	I	INVESTOR
PW	237	1	M	MUNICIPALITY
PW	237	1	N	COUNTY
PW	237	1	O	OTHER
PW	237	1	S	STATE
PW	237	1	U	UNKNOWN
PW	237	1	8	OTHER
PW	237	1	1	INVESTOR
PW	246	1	E	EMERGENCY SOURCE
PW	246	1	T	INTERIM SOURCE
PW	246	1	O	OTHER
PW	246	1	P	PERMANENT SOURCE
PW	246	1	R	RESERVE SOURCE
PW	246	1	S	SEASONAL SOURCE
PW	246	1	8	OTHER
PW	246	1	1	INTERIM SOURCE
PW	247	4	0515	SALT RIVER
PW	247	4	0516	GREEN RIVER
PW	247	4	0517	WABASH RIVER
PW	247	4	0518	EAST FORK WHITE RIVER
PW	247	4	0519	WEST FORK WHITE RIVER
PW	247	4	0520	CUMBERLAND RIVER
PW	247	4	0521	OHIO RIVER MAIN STEM
PW	247	4	0803	MENOMINEE
PW	247	4	0804	CEDAR
PW	247	4	0805	FORD
PW	247	4	0806	ESCANABA
PW	247	4	0807	RAPID
PW	247	4	0808	WHITEFISH
PW	247	4	0809	STURGEON
PW	247	4	0810	FISHDAM
PW	247	4	0811	MANISTIQUE
PW	247	4	0816	BOARDMAN
PW	247	4	0818	BETSIE
PW	247	4	0823	WHITE
PW	247	4	0828	GRAND
PW	248	3	001	0390531 0401228
PW	248	3	003	0370009 0372033
PW	248	3	005	0384401 0390156
PW	248	3	007	0420925 0433011
PW	248	3	009	0395003 0400626
PW	248	3	011	0410032 0423527
PW	248	3	013	0385133 0392412

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                                        MODEL STATE INFORMATION SYSTEM
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DATE 05/11/77                                 CODE VALUE TABLE                                      PAGE     5

                    DATA ELEMENT
         FILE ID    CATALOGUE NO    DATA ELEMENT LENGTH    DATA ELEMENT VALUE       DATA ELEMENT DESCRIPTION

           PW           248                  3                    015                0415556 0421219
           PW           248                  3                    017                0395204 0400725
           PW           248                  3                    019                0395241 0402331
           PW           248                  3                    021                0392100 0404943
           PW           248                  3                    023                0391009 0392908
           PW           248                  3                    025                0383543 0393453
           PW           248                  3                    027                0382447 0394408
           PW           248                  3                    029                0392226 0404056
           PW           248                  3                    031                0412753 0420936
           PW           248                  3                    033                0385107 0391039
           PW           248                  3                    035                0391021 0392246
           PW           248                  3                    037                0413748 0420935
           PW           248                  3                    039                0400301 0401653
           PW           248                  3                    041                0393848 0405246
           PW           248                  3                    043                0413959 0425924
           PW           249                  3                    001                0905439 0923018
           PW           249                  3                    003                0891034 0903039
           PW           249                  3                    005                0891539 0903814
           PW           249                  3                    007                0884205 0895625
           PW           249                  3                    009                0903038 0915443
           PW           249                  3                    011                0890952 0905106
           PW           249                  3                    013                0902704 0915610
           PW           249                  3                    015                0894107 0901940
           PW           249                  3                    017                0895919 0913507
           PW           249                  3                    019                0875545 0882842
           PW           249                  3                    021                0890143 0903229
           PW           249                  3                    023                0873214 0880111
           PW           249                  3                    025                0881503 0894218
           PW           249                  3                    027                0890837 0904227
           PW           249                  3                    029                0875809 0882836
           PW           249                  3                    031                0873126 0881640
           PW           249                  3                    033                0873121 0885721
           PW           249                  3                    035                0880111 0882841
           PW           249                  3                    037                0883453 0895640
           PW           249                  3                    039                0883453 0890829
           PW           249                  3                    041                0875625 0882836
           PW           249                  3                    043                0875524 0881640
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MSI8030                                  MODEL STATE INFORMATION SYSTEM
                                         STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                                  CODE VALUE TABLE                                  PAGE     1

                    DATA ELEMENT
         FILE ID    CATALOGUE NO     DATA ELEMENT LENGTH     DATA ELEMENT VALUE        DATA ELEMENT DESCRIPTION
           RG           044                   1                      C                 COLOR
           RG           044                   1                      D                 TDS
           RG           044                   1                      F                 FOAMING
           RG           044                   1                      H                 HEALTH
           RG           044                   1                      I                 IRON
           RG           044                   1                      L                 CHLORIDE
           RG           044                   1                      M                 MANGANESE
           RG           044                   1                      O                 ODOR
           RG           044                   1                      P                 PH
           RG           044                   1                      S                 SULFATE
           RG           044                   1                      T                 TASTE
           RG           044                   1                      U                 COPPER
           RG           044                   1                      V                 CORROSIVITY
           RG           044                   1                      Y                 HYDROGEN SULFIDE
           RG           044                   1                      Z                 ZINC
           RG           044                   1                      0                 ODOR
           RG           044                   1                      1                 IRON
           RG           044                   1                      2                 ZINC
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MSIS030

DATE 05/11/77

MODEL STATE INFORMATION SYSTEM
STANDARD PROCESSING SUBSYSTEM

CODE VALUE TABLE

FILE ID	DATA ELEMENT CATALOGUE NO	DATA ELEMENT LENGTH	DATA ELEMENT VALUE	DATA ELEMENT DESCRIPTION
VE	461	1	A	INTEREST IN V OR E EXPRESSED
VE	461	1	C	APPLICATION FOR V OR E REC'D
VE	461	1	E	STATE PROPOSES TO DENY V OR E
VE	461	1	G	STATE PROPOSES TO GRANT V OR E
VE	461	1	I	HEARING ON PROPOSAL SCHEDULED
VE	461	1	K	HEARING ON PROPOSAL HELD
VE	461	1	M	COMPLIANCE SCHEDULE PRESCRIBED
VE	461	1	O	HEARING ON SCHEDULE OFFERED
VE	461	1	Q	HEARING ON SCHEDULE HELD
VE	461	1	R	ADDITIONAL INFORMATION DESIRED
VE	461	1	S	V OR E GRANTED'
VE	461	1	T	V OR E DENIED
VE	461	1	U	STATE SETS MONITORING REQ'M
VE	461	1	V	EPA SETS MONITORING REQ'M
VE	461	1	W	NOTIFICATION GIVEN TO PUBLIC
VE	461	1	X	OTHER
VE	461	1	Y	NOTIFICATION GIVEN TO EPA
VE	461	1	Z	PENDING DELETION
VE	461	1	0	HEARING ON SCHEDULE OFFERED
VE	461	1	1	HEARING ON PROPOSAL SCHEDULED
VE	465	3	020	AERATION
VE	465	3	040	PRECHLORINATION
VE	465	3	060	COAGULATION
VE	465	3	080	SEDIMENTATION
VE	465	3	100	FILTRATION
VE	465	3	120	CORROSION CONTROL
VE	465	3	140	SOFTENING
VE	465	3	160	TASTE AND ODOR CONTROL
VE	465	3	180	IRON REMOVAL
VE	465	3	200	AMMONIATION
VE	465	3	220	FLORIDE ADJUSTMENT
VE	465	3	240	DISINFECTION
VE	466	3	001	LIME COAGULATION
VE	466	3	003	PRECIPITATION
VE	466	3	005	SEQUESTRATION
VE	466	3	007	STRAINING
VE	466	3	009	SCREENING
VE	466	3	011	DESALINATION
VE	466	3	013	REVERSE OSMOSIS
VE	466	3	015	MANGANESE REMOVAL
VE	466	3	017	ACTIVATED CARBON (GRANULAR)
VE	466	3	019	ACTIVATED CARBON (POWDERED)
VE	466	3	021	FLUORIDATION
VE	466	3	023	FLUORIDE REMOVAL
VE	466	3	025	U[illegible] DISINFECTION
VE	466	3	027	OZONE DISINFECTION
VE	466	3	029	IODINE DISINFECTION

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                                              MOL L ST TE   FOR         S
NS18030                                       STANDARD PROCESSING SUBSYSTEM

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                       DATA ELEMENT
            FILE ID    CATALOGUE NO       DATA ELEMENT LENGTH      DATA ELEMENT VALUE          DATA ELEMENT DESCRIPTION

              VE           466                     3                     031               CHLORINE DISINFECTION
              VE           466                     3                     033               CHLORINE DIOXIDE
              VE           466                     3                     035               BREAKPOINT CHLORINATION
              VE           466                     3                     037               POST-CHLORINATION
              VE           466                     3                     038               SUPER-CHLORINATION
              VE           466                     3                     041               CARBON ABSORPTION
              VE           466                     3                     043               ELECTRODIALYSIS
              VE           466                     3                     045               DISTILLATION
              VE           466                     3                     047               RE-CARBONATION
              VE           466                     3                     049               ION EXCHANGE
              VE           466                     3                     051               FLOCCULATION
              VE           466                     3                     053               PH ADJUSTMENT
              VE           466                     3                     055               CHEMICAL OXIDATION
              VE           466                     3                     057               ABSORBING AGENTS
              VE           466                     3                     998               OTHER
              VE           466                     3                     999               NO TREATMENT REQUIRED
              VE           469                     2                     01                CANNOT COMPLY AFTER TREATMENT
              VE           469                     2                     03                CANNOT AFFORD FACILITY CONST.
              VE           469                     2                     05                FUNDS PENDING
              VE           469                     2                     07                FACILITY CONST. PENDING
              VE           469                     2                     09                UNABLE TO AFFORD TREATMENT
              VE           469                     2                     11                TREATMENT UNNECESSARY
              VE           469                     2                     13                TREATMENT IMPRACTICAL
              VE           469                     2                     99                OTHER
              VE           476                     1                     2                 DELETE MILESTONE
              VE           476                     1                     1                 FACILITY CONSTRUCTION NOT COMP
              VE           476                     1                     3                 NEW WATER SOURCE NOT FOUND
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MSI8030                                        MODEL STATE INFORMATION SYSTEM
                                               STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77                                       DATA ELEMENT TABLE                                       PAGE    1

                           RECORD INFORMATION                                    NAME INFORMATION
                                  START POSITION          FIELD LENGTH
       FILE ID   CATALOGUE NO   TRANSACTION / FILE    TRANSACTION / FILE     MNEMONIC NAME          HISTORY CODE

         EA          430           01        0001        05        05        EA-CASE-ID                  Y
         EA          431           09        0006        12        12        EA-CASE-NR                  Y
         EA          432           21        0018        30        30        EA-CASENAM                  Y
         EA          433           51        0048        06        05        EA-ACT-DAT                  Y
         EA          434           08        0053        01        01        EA-CLOSE                    Y
         EA          435           08        0054        01        01        EA-PLNTYPE                  Y
         EA          436           09        0055        30        30        EA-PLNNAME                  Y
         EA          437           39        0085        01        01        EA-DEFTYPE                  Y
         EA          438           40        0086        30        30        EA-DEFNAME                  Y
         EA          439           08        0116        07        07        EA-ORDERNO                  Y
         EA          440           15        0123        06        05        EA-ORDATE                   Y
         EA          441           21        0128        07        07        EA-PERNO                    Y
         EA          442           28        0135        06        05        EA-PERDATE                  Y
         EA          443           58        0140        07        07        EA-PHS-ID                   Y
         EA          444           65        0147        02        02        EA-STATE                    Y
         EA          445           10        ****        06        05        EA-VIL-DAT                  Y
         EA          446           16        ****        04        04        EA-CON-ID                   Y
         EA          447           08        ****        02        02        EA-VIOL-TP                  Y
         EA          448           08        ****        30        30        EA-ABSTRAC                  Y
         EA          449           57        0559        01        01        EA-LEGALST                  Y
         EA          450           00        0560        00        05        EA-LST-UP                   Y
         EA          451           00        0565        00        02        EA-HISTONE                  Y
         EA          452           10        ****        06        05        EA-TAR-DT                   Y
         EA          453           16        ****        06        05        EA-ATT-DAT                  Y
         EA          454           08        ****        02        02        EA-MIL-COD                  Y
         EA          904           06        ****        02        02        EA-TRAN-CD                  N
         EA          907           08        ****        01        01        EA-CRDT-CD                  N
         EA          911           22        ****        01        01        EA-DEL-CD                   N
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MSI8030                                     MODEL STATE INFORMATION SYSTEM
                                            STANDARD PROCESSING SUBSYSTEM
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                                                 DATA ELEMENT TABLE
                                                                                                    PAGE     1
                                  RECORD INFORMATION
      FILE ID    CATALOGUE NO        START POSITION           FIELD LENGTH            NAME INFORMATION
                                  TRANSACTION / FILE       TRANSACTION / FILE
                                                                                      MNEMONIC NAME            HISTORY CODE

        LB           319              01       0001           05        05            LB-ID                        N
        LB           320              06       0006           01        01            LB-CONTGRP                   N
        LB           321              07       0007           01        01            LB-OW-TYPE                   N
        LB           322              08       0008           30        30            LB-NAME                      N
        LB           323              38       0038           06        05            LB-EXP-DT                    N
        LB           324              00       0043           00        06            LB-REL-REC                   N
        LB           325              00       0049           00        02            LB-METHCNT                   N
        LB           820              07       ****           72        03            LB-METHOD                    N
        LB           914              79       ****           02        02            TRAN-CODE                    N
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                                         MODEL STATE INFORMATION SYSTEM
MSI8030                                  STANDARD PROCESSING SUBSYSTEM                                              PAGE     1

DATE 05/11/77                                   DATA ELEMENT TABLE

                               RECORD INFORMATION                                          NAME INFORMATION
                                  START POSITION              FIELD LENGTH
      FILE ID   CATALOGUE NO   TRANSACTION / FILE         TRANSACTION / FILE              MNEMONIC NAME              HISTORY CODE

        OM          478            01        0001              05        05                OM-ADS-ID                     Y
        OM          479            08        0006              01        01                OM-ADS-TYP                    Y
        OM          480            09        0007              30        30                OM-ADS-NAM                    Y
        OM          481            39        0037              30        30                OM-ADS-STR                    Y
        OM          482            08        0067              30        30                OM-ADS-CTY                    Y
        OM          483            38        0097              02        02                OM-ADS-STA                    Y
        OM          484            40        0099              05        05                OM-ADS-ZIP                    Y
        OM          485            45        0104              03        03                OM-AREA-CD                    Y
        OM          486            48        0107              07        07                OM-PH-NUM                     Y
        OM          487            00        0114              00        05                OM-LST-UPD                    Y
        OM          488            08        0119              07        07                OM-CER-NUM                    Y
        OM          489            15        0126              07        07                OM-PHS-ID                     Y
        OM          490            22        ****              06        01                OM-OP-CLS                     Y
        OM          491            28        0139              06        05                OM-RNL-DT                     Y
        OM          903            06        ****              02        02                OM-TRAN-CD                    N
        OM          908            08        ****              01        01                OM-CRDT-CD                    N
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                                          MODEL STATE INFORMATION SYSTEM
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                        RECORD INFORMATION                                           NAME INFORMATION
                                 START POSITION          FIELD LENGTH
       FILE ID   CATALOGUE NO   TRANSACTION / FILE    TRANSACTION / FILE        MNEMONIC NAME              HISTORY CODE

         PH          310            00       0001        00        07            PH-PHS-ID                      Y
         PH          311            00       0008        00        03            PH-CAT-NO                      Y
         PH          312            00       0011        00        05            PH-CUR-UP                      Y
         PH          313            00       0016        00        30            PH-PH-NAME                     Y
         PH          314            00       0046        00        02            PH-S-REGN                      Y
         PH          315            00       0048        00        02            PH-S-DIST                      Y
         PH          316            00       0050        00        05            PH-LBT-UP                      Y
         PH          317            00       0055        00        30            PH-OLD-VAL                     Y
         PH          318            00       0085        00        30            PH-NEW-VAL                     Y
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                                      MODEL STATE INFORMATION SYSTEM
MSIS030                               STANDARD PROCESSING SUBSYSTEM

DATE 05/11/77                              DATA ELEMENT TABLE                                             PAGE    1

                           RECORD INFORMATION                                     NAME INFORMATION
                                 START POSITION         FIELD LENGTH
    FILE ID   CATALOGUE NO    TRANSACTION / FILE     TRANSACTION / FILE          MNEMONIC NAME              HISTORY CODE

      PS          399            01        0001         07        07             PS-PHS-ID                      N
      PS          400            10        0010         04        04             PS-CONTD                       N
      PS          401            28        0014         03        03             PS-SAMPLID                     N
      PS          402            37        0017         01        01             PS-SAMPLTP                     N
      PS          403            31        0018         06        05             PS-SAMPLDT                     N
      PS          404            38        0023         04        04             PS-SAMPLTM                     N
      PS          405            17        0027         10        10             PS-SAMPLKY                     N
      PS          406            00        0037         01        01             PS-RECDTYP                     N
      PS          407            14        0049         03        03             PS-AN-METH                     N
      PS          408            42        0052         05        05             PS-LAB-ID                      N
      PS          409            17        0058         04        05             PS-D-ANRSL                     N
      PS          410            21        0063         01        01             PS-D-ANDEC                     N
      PS          411            22        0064         06        05             PS-D-ANDTE                     N
      PS          412            23        0069         04        04             PS-S-HIRSL                     N
      PS          413            27        0073         01        01             PS-S-HIDEC                     N
      PS          414            28        0074         04        04             PS-S-LORSL                     N
      PS          415            32        0078         01        01             PS-S-LODEC                     N
      PS          416            33        0079         04        04             PS-S-MNRSL                     N
      PS          417            37        0083         01        01             PS-S-MNDEC                     N
      PS          418            17        0084         03        03             PS-REQ-SPL                     N
      PS          419            20        0087         03        03             PS-ACT-SPL                     N
      PS          420            49        0090         06        05             PS-PRD-STR                     N
      PS          421            55        0095         06        05             PS-PRD-END                     N
      PS          422            73        0118         01        01             PS-CHK-FED                     N
      PS          423            74        0119         01        01             PS-CHK-STA                     N
      PS          424            75        0120         03        03             PS-CHK-NUM                     N
      PS          425            38        0129         04        04             PS-FED-VIO                     N
      PS          426            42        0133         04        04             PS-STA-VIO                     N
      PS          427            46        0137         03        03             PS-VIO-DUR                     N
      PS          428            78        0140         01        01             PS-NOTIPUB                     N
      PS          429            79        0141         01        01             PS-NOTISTA                     N
      PS          817            08        0008         02        02             PS-TRAN-CD                     N
      PS          818            00        0142         00        01             PS-ERR-IND                     N
      PS          819            00        0057         00        01             PS-LB-OWN                      N
      PS          900            61        0017         01        01             PS-SMPLTP                      N
      PS          901            62        0018         06        05             PS-SMPLDT                      N
      PS          902            68        0052         05        05             PS-LB-ID
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MSI8030                                   P EL  YAY  NF               N
                                          STANDARD PROCESSING SUBSYS
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                           RECORD INFORMATION                                   NAME INFORMATION
                                 START POSITION            FIELD LENGTH
        FILE ID   CATALOGUE NO   TRANSACTION / FILE     TRANSACTION / FILE      MNEMONIC NAME          HISTORY CODE

          PW         145            01       0001          07       07          PW-ID                      N
          PW         146            10       0008          30       30          PW-OWNA                    Y
          PW         147            40       0038          30       30          PW-PL-STRT                 Y
          PW         148            10       0068          30       30          PW-PL-CITY                 Y
          PW         149            40       0098          02       02          PW-PL-STAT                 Y
          PW         150            42       0100          05       05          PW-PL-ZIP                  Y
          PW         151            10       0105          30       30          PW-MA-NAME                 Y
          PW         152            40       0135          30       30          PW-MA-STRT                 Y
          PW         153            10       0165          30       30          PW-MA-CITY                 Y
          PW         154            40       0195          02       02          PW-MA-STAT                 Y
          PW         155            42       0197          05       05          PW-MA-ZIP                  Y
          PW         156            47       0202          03       03          PW-MA-ARCU                 Y
          PW         157            50       0205          07       07          PW-MA-PNUM                 Y
          PW         158            10       0212          15       15          PW-PL-ACTY                 N
          PW         159            25       0227          03       03          PW-PL-ACNT                 N
          PW         160            28       0230          03       03          PW-PL-RESR                 N
          PW         161            31       0233          01       01          PW-PL-RESI                 N
          PW         162            32       0234          01       01          PW-PL-COMP                 N
          PW         163            33       0235          01       01          PW-PL-RECR                 N
          PW         164            34       0236          01       01          PW-PL-MOMO                 N
          PW         165            35       0237          01       01          PW-PL-INST                 N
          PW         166            36       0238          01       01          PW-PL-SCHL                 N
          PW         167            37       0239          01       01          PW-PL-MUTL                 N
          PW         168            38       0240          01       01          PW-PL-RLST                 N
          PW         169            39       0241          01       01          PW-PL-SSTA                 N
          PW         170            40       0242          01       01          PW-PL-CAMP                 N
          PW         171            41       0243          01       01          PW-PL-PIC                  N
          PW         172            42       0244          01       01          PW-PL-LODG                 N
          PW         173            43       0245          01       01          PW-PL-MARI                 N
          PW         174            44       0246          01       01          PW-PL-SKI                  N
          PW         175            45       0247          01       01          PW-PL-BATH                 N
          PW         176            46       0248          01       01          PW-PL-VCTR                 N
          PW         177            47       0249          01       01          PW-PL-HWY                  N
          PW         178            48       0250          01       01          PW-PL-AIR                  N
          PW         179            49       0251          01       01          PW-PL-OTHR                 N
          PW         180            10       0252          07       07          PW-PL-CNUM                 Y
          PW         181            17       0259          01       01          PW-PL-CARR                 Y
          PW         182            18       0260          01       01          PW-PL-TYPE                 N
          PW         183            19       0261          09       09          PW-PL-POPL                 Y
          PW         184            28       0270          07       07          PW-PL-SNUM                 Y
          PW         185            35       0277          07       07          PW-PL-MNUM                 Y
          PW         186            10       0284          10       10          PW-PL-AVPR                 Y
          PW         187            20       0294          10       10          PW-PL-DECA                 N
          PW         188            30       0304          10       10          PW-PL-EMER                 Y
          PW         189            40       0314          10       10          PW-PL-STCA                 Y
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                                     MODEL STATE INFORMATION SYSTEM
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DATE 05/11/77                              DATA ELEMENT TABLE
                                                                                   NAME INFORMATION
                      RECORD INFORMATION
                                START POSITION          FIELD LENGTH
  FILE ID  CATALOGUE NO     TRANSACTION / FILE      TRANSACTION / FILE          MNEMONIC NAME          HISTORY CODE

    PW         190              50      0324            10      10             PW-PL-MAXP                  Y
    PW         191              10      0334            04      04             PW-PL-REGN                  Y
    PW         192              14      0338            06      05             PW-PL-SURV                  Y
    PW         193              20      0343            02      02             PW-PL-CYCL                  N
    PW         194              22      0345            01      01             PW-PL-ACTV                  N
    PW         195              23      0346            06      05             PW-PL-DDAT                  N
    PW         196              29      0351            01      01             PW-PL-DREA                  N
    PW         197              30      0352            12      12             PW-PL-MANU                  N
    PW         198              10      0364            02      02             PW-S-CODE                   Y
    PW         199              12      0366            01      01             PW-S-REGE                   N
    PW         200              13      0367            02      02             PW-S-REGN                   N
    PW         201              15      0369            02      02             PW-S-DIST                   N
    PW         202              17      0371            01      01             PW-S-BFLG                   Y
    PW         203              18      0372            01      01             PW-S-MONT                   N
    PW         204              19      0373            03      03             PW-S-NSAM                   N
    PW         205              22      0376            04      04             PW-S-SAGN                   N
    PW         206              26      0380            04      04             PW-S-SFND                   N
    PW         207              30      0384            01      01             PW-S-MNCK                   N
    PW         208              31      0385            03      03             PW-S-NSPFO                  N
    PW         209              34      0388            01      01             PW-S-NCKB                   N
    PW         210              35      0389            02      02             PW-S-CLOR                   N
    PW         211              37      0391            01      01             PW-S-TFLG                   Y
    PW         212              38      0392            02      02             PW-S-TRUN                   N
    PW         213              11      ****            04      04             PW-S-CONID                  Y
    PW         214              15      ****            03      03             PW-S-SPFO                   Y
    PW         215              10      0422            04      04             PW-S-ORBGN                  N
    PW         216              14      0426            04      04             PW-S-OREND                  N
    PW         217              19      0430            03      03             PW-S-ATEM                   N
    PW         218              22      0433            04      04             PW-S-NITR                   N
    PW         219              26      0437            01      01             PW-S-RPLG                   Y
    PW         220              27      0438            01      01             PW-S-RNUM                   N
    PW         221              28      0439            02      02             PW-S-BETA                   N
    PW         222              30      0441            01      01             PW-S-NUCL                   N
    PW         223              31      0442            01      01             PW-S-FATYI                  N
    PW         224              12      ****            04      04             PW-S-FACON                  N
    PW         225              16      ****            02      02             PW-S-CFREQ                  N
    PW         226              10      0504            02      02             PW-S-GALP                   N
    PW         227              12      0506            02      02             PW-S-RADM                   N
    PW         228              14      0508            01      01             PW-S-NUMSP                  N
    PW         229              18      0509            01      01             PW-S-GWATR                  N
    PW         230              15      0510            01      01             PW-S-RRED                   N
    PW         231              16      0511            04      04             PW-S-LAST                   Y
    PW         232              20      0515            01      01             PW-S-ENGM                   N
    PW         233              00      0516            00      17             PW-S-REBV                   N
    PW         234              00      0616            00      05             PW-LST-UP                   N
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MSI8030                                          MODEL STATE INFORMATION SYSTEM
                                                 STANDARD PROCESSING SUBSYSTEM
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                              RECORD INFORMATION                                        NAME INFORMATION
                                       START POSITION          FIELD LENGTH
          FILE ID    CATALOGUE NO   TRANSACTION / FILE      TRANSACTION / FILE          MNEMONIC NAME            HISTORY CODE

            PW           235            11        ****           05        05            PW-LA-ID                     N
            PW           236            16        ****           01        01            PW-LA-CFLG                   Y
            PW           237            47        0651           01        01            PW-OW-TYPE                   Y
            PW           238            11        ****           08        08            PW-VE-CTAM                   N
            PW           239            15        ****           05        05            PW-VE-MCL                    N
            PW           240            20        ****           01        01            PW-VE-DEC                    N
            PW           241            21        ****           03        03            PW-VE-AMF                    N
            PW           242            00        0705           00        02            PW-PL-SOMM                   N
            PW           243            12        ****           15        15            PW-PL-SONA                   Y
            PW           244            27        ****           01        01            PW-PL-SOCO                   Y
            PW           245            28        ****           02        02            PW-PL-WELL                   Y
            PW           246            30        ****           01        01            PW-PL-AVAL                   Y
            PW           247            31        ****           04        04            PW-PL-BASN                   Y
            PW           248            35        ****           07        07            PW-PL-LATI                   Y
            PW           249            42        ****           07        07            PW-PL-LONG                   Y
            PW           250            49        ****           07        07            PW-PL-ALTD                   Y
            PW           251            56        ****           01        01            PW-PL-AERA                   Y
            PW           252            57        ****           01        01            PW-PL-PREC                   Y
            PW           253            58        ****           01        01            PW-PL-COAG                   Y
            PW           254            59        ****           01        01            PW-PL-SEDI                   Y
            PW           255            60        ****           01        01            PW-PL-FILT                   Y
            PW           256            61        ****           01        01            PW-PL-CORR                   Y
            PW           257            62        ****           01        01            PW-PL-SOFT                   Y
            PW           258            63        ****           01        01            PW-PL-TAST                   Y
            PW           259            64        ****           01        01            PW-PL-IRON                   Y
            PW           260            65        ****           01        01            PW-PL-AMMO                   Y
            PW           261            66        ****           01        01            PW-PL-FLOR                   Y
            PW           262            67        ****           01        01            PW-PL-DISI                   Y
            PW           263            68        ****           01        01            PW-PL-OTHE                   Y
            PW           264            00        ****           00        03            PW-PL-RESE                   Y
            PW           701            42        0704           01        01            PW-PL-COIN                   N
            PW           702            32        0843           01        01            PW-S-FATY2                   N
            PW           906            08        ****           02        02            PW-TRAN-CD                   N
            PW           910            10        ****           01        01            PW-CRDT-CD                   N
            PW           912            10        ****           01        01            PW-OCCUR1                    N
            PW           913            10        ****           02        02            PW-OCCUR2                    N
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MSI3030                                    MODEL STATE INFORMATION SYSTEM
                                           STANDARD PROCESSING SUBSYSTEM
DATE 05/11/77
                                                DATA ELEMENT TABLE                                        PAGE     1

                                   RECORD INFORMATION                                    NAME INFORMATION
                                      START POSITION               FIELD LENGTH
           FILE ID   CATALOGUE NO   TRANSACTION / FILE         TRANSACTION / FILE         MNEMONIC NAME               HISTORY CODE

             RG          001             01       0001            04       04             RG-CONID                        N
             RG          002             05       0005            02       02             RG-A-RGLVL                      N
             RG          003             07       0007            11       15             RG-A-CONAM                      N
             RG          004             18       0022            06       05             RG-A-EFFDT                      N
             RG          005             24       0027            03       03             RG-A-M-GRA                      N
             RG          006             27       0030            03       03             RG-A-M-CHR                      N
             RG          007             30       0033            03       03             RG-A-GADRS                      N
             RG          008             33       0036            03       03             RG-A-GAIRS                      N
             RG          009             36       0039            03       03             RG-A-R&FRS                      N
             RG          010             39       0042            03       03             RG-A-R&ANM                      N
             RG          011             42       0045            01       01             RG-A-NUMBP                      N
             RG          012             43       0046            01       01             RG-A-MINFO                      N
             RG          013             44       0047            02       02             RG-A-INIPD                      N
             RG          014             46       0049            02       02             RG-A-FRACT                      N
             RG          015             48       0051            02       02             RG-A-MINVF                      N
             RG          016             50       0053            01       01             RG-A-AC#BP                      N
             RG          017             51       0054            01       01             RG-A-CNCOB                      N
             RG          019             05       0005            02       02             RG-B-RGLVL                      N
             RG          020             07       0007            10       15             RG-B-CONAM                      N
             RG          021             17       0022            06       05             RG-B-EFFDT                      N
             RG          022             23       0027            02       02             RG-B-ANMCL                      N
             RG          023             25       0029            05       05             RG-B-TRIBC                      N
             RG          024             30       0034            03       03             RG-B-STRBC                      N
             RG          025             33       0037            03       03             RG-B-MRENN                      N
             RG          026             36       0040            03       03             RG-B-MRECN                      N
             RG          027             39       0043            03       03             RG-B-SACIC                      N
             RG          028             42       0046            01       01             RG-B-CNCOB                      N
             RG          029             43       0047            01       01             RG-B-MONOD                      N
             RG          030             44       0048            01       01             RG-B-AVCOM                      N
             RG          031             45       0049            06       06             RG-B-NMPOP                      N
             RG          032             51       0055            01       01             RG-B-NMMBP                      N
             RG          033             52       0056            01       01             RG-B-NNMFQ                      N
             RG          034             53       0057            02       02             RG-B-NVMFQ                      N
             RG          035             55       0059            02       02             RG-B-CNIOS                      N
             RG          036             57       0061            02       02             RG-B-CNSTS                      N
             RG          037             59       0063            02       02             RG-B-CTOMF                      N
             RG          038             61       0065            02       02             RG-B-CSTMF                      N
             RG          039             63       0067            02       02             RG-B-CVMFQ                      N
             RG          040             65       0069            02       02             RG-B-CTOBP                      N
             RG          042             05       0005            02       02             RG-C-RGLVL                      N
             RG          043             07       0007            11       15             RG-C-CONAM                      N
             RG          044             18       0022            01       01             RG-C-RSNCO                      N
             RG          045             19       0023            06       06             RG-C-MCLUN                      N
             RG          046             25       0029            06       06             RG-C-MCL                        N
             RG          047             31       0035            01       01             RG-C-MCLDC                      N
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MBI3030                              MODEL STATE INFORMATION SYSTEM
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                         RECORD INFORMATION                                       NAME INFORMATION
                                 START POSITION          FIELD LENGTH
       FILE ID   CATALOGUE NO   TRANSACTION / FILE     TRANSACTION / FILE           MNEMONIC NAME            HISTORY CODE

         RG          048              32      0036         05       05              RG-C-MCLOW                   N
         RG          049              37      0041         01       01              RG-C-MCLOD                   N
         RG          050              38      0042         05       05              RG-C-MCLHI                   N
         RG          051              43      0047         01       01              RG-C-MCLHO                   N
         RG          052              44      0048         01       01              RG-C-CKSAM                   N
         RG          053              45      0049         01       01              RG-C-SEACD                   N
         RG          054              46      0050         01       01              RG-C-SPECD                   N
         RG          055              47      0051         02       02              RG-C-MINTM                   N
         RG          056              49      0053         02       02              RG-C-CHKPD                   N
         RG          057              51      0055         06       05              RG-C-EFFDT                   N
         RG          058              57      0060         01       01              RG-C-CGRVR                   N
         RG          059              58      0061         04       04              RG-C-CGSPF                   N
         RG          060              62      0065         04       04              RG-C-CGVFQ                   N
         RG          061              66      0069         02       02              RG-C-CGMNG                   N
         RG          062              68      0071         01       01              RG-C-CSRVR                   N
         RG          063              69      0072         04       04              RG-C-CSSPF                   N
         RG          064              73      0076         04       04              RG-C-CSVFQ                   N
         RG          065              77      0080         02       02              RG-C-CSMNG                   N
         RG          066              51      0082         06       05              RG-C-NEFDT                   N
         RG          067              57      0087         01       01              RG-C-NGRVR                   N
         RG          068              58      0088         04       04              RG-C-NGSPF                   N
         RG          069              62      0092         04       04              RG-C-NGVFQ                   N
         RG          070              66      0096         02       02              RG-C-NGMNG                   N
         RG          071              68      0098         01       01              RG-C-NSRVR                   N
         RG          072              69      0099         04       04              RG-C-NSSPF                   N
         RG          073              73      0103         04       04              RG-C-NSVFQ                   N
         RG          074              77      0107         02       02              RG-C-NSMNG                   N
         RG          076              05      0005         02       02              RG-E-RGLVL                   N
         RG          077              07      0007         01       01              RG-E-TALID                   N
         RG          078              08      0008         06       05              RG-E-EFFDT                   N
         RG          079              14      0013         15       15              RG-E-CONAM                   N
         RG          080              29      0028         06       06              RG-E-ANCOM                   N
         RG          081              35      0034         04       04              RG-E-DETLM                   N
         RG          082              39      0038         05       01              RG-E-NPPCD                   N
         RG          084              05      0005         02       02              RG-F-RGLVL                   N
         RG          085              07      0007         01       01              RG-F-TALID                   N
         RG          086              08      0008         03       03              RG-F-TRFLO                   N
         RG          087              11      0011         03       03              RG-F-TRFHI                   N
         RG          088              14      0014         03       03              RG-F-TRCLO                   N
         RG          089              17      0017         03       03              RG-F-TRCHI                   N
         RG          090              20      0020         06       06              RG-F-TRMCL                   N
         RG          091              26      0026         03       03              RG-F-RRFLO                   N
         RG          092              29      0029         03       03              RG-F-RRFHI                   N
         RG          093              32      0032         03       03              RG-F-RRCLO                   N
         RG          094              35      0035         03       03              RG-F-RRCHI                   N
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MSI8030                                       MODEL STATE INFORMATION SYSTEM
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                             RECORD INFORMATION                                       NAME INFORMATION
                                 START POSITION              FIELD LENGTH
          FILE ID   CATALOGUE NO   TRANSACTION / FILE       TRANSACTION / FILE        MNEMONIC NAME              HISTORY CODE

            RG          096             05        0005        02        02            RG-M-ROLVL                      N
            RG          097             07        0007        08        15            RG-M-CONAM                      N
            RG          098             15        0022        06        05            RG-M-EFFDT                      N
            RG          099             21        0027        02        02            RG-M-MF-BM                      N
            RG          100             23        0029        02        02            RG-M-MF-MT                      N
            RG          101             25        0031        02        02            RG-M-MF-PS                      N
            RG          102             27        0033        02        02            RG-M-MF-MR                      N
            RG          103             29        0035        02        02            RG-M-MF-MC                      N
            RG          104             31        0037        02        02            RG-M-FT-BM                      N
            RG          105             33        0039        02        02            RG-M-FT-MT                      N
            RG          106             35        0041        02        02            RG-M-FT-PS                      N
            RG          107             37        0043        02        02            RG-M-FT-MR                      N
            RG          108             39        0045        02        02            RG-M-FT-MC                      N
            RG          109             41        0047        02        02            RG-M-FH-BM                      N
            RG          110             43        0049        02        02            RG-M-FH-MT                      N
            RG          111             45        0051        02        02            RG-M-FH-PS                      N
            RG          112             47        0053        02        02            RG-M-FH-MR                      N
            RG          113             49        0055        02        02            RG-M-FH-MC                      N
            RG          114             51        0057        01        01            RG-M-ROMAX                      N
            RG          115             52        0058        01        01            RG-M-ROSPD                      N
            RG          116             53        0059        01        01            RG-M-CKCDS                      N
            RG          117             54        0060        01        01            RG-M-CKMNP                      N
            RG          118             55        0061        02        02            RG-M-CKMCB                      N
            RG          119             57        0063        02        02            RG-M-C-LEU                      N
            RG          120             59        0065        02        02            RG-M-C-MXP                      N
            RG          121             61        0067        02        02            RG-M-C-MCL                      N
            RG          122             63        0069        02        02            RG-M-C-MXT                      N
            RG          123             65        0071        06        05            RG-M-NEFDT                      N
            RG          124             71        0076        01        01            RG-M-NSEAS                      N
            RG          125             72        0077        01        01            RG-M-NPERD                      N
            RG          126             73        0078        02        02            RG-M-NSPFQ                      N
            RG          128             05        0005        02        02            RG-P-RBLVL                      N
            RG          129             07        0007        01        01            RG-P-TALID                      N
            RG          130             08        0008        09        09            RG-P-T-FRM                      N
            RG          131             17        0017        09        09            RG-P-T-TOP                      N
            RG          132             26        0026        03        03            RG-P-T-FRQ                      N
            RG          134             05        0005        02        02            RG-T-ROLVL                      N
            RG          135             07        0007        09        15            RG-T-CONAM                      N
            RG          136             16        0022        02        02            RG-T-MOMCL                      N
            RG          137             18        0024        02        02            RG-T-CNMCL                      N
            RG          138             20        0026        02        02            RG-T-CNSPL                      N
            RG          139             22        0028        06        05            RG-T-EFFDT                      N
            RG          140             28        0033        01        01            RG-T-ALLBR                      N
            RG          141             29        0034        01        01            RG-T-RPTIN                      N
            RG          142             30        0035        03        03            RG-T-CSPFQ                      N
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                                          MODEL STATE INFORMATION SYSTEM
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                             RECORD INFORMATION                                         NAME INFORMATION
                                       START POSITION            FIELD LENGTH
            FILE ID    CATALOGUE NO   TRANSACTION / FILE      TRANSACTION / FILE        MNEMONIC NAME            HISTORY CODE

              RG           143            33       0038          03       03            RG-T-NSPFO                    N
              RG           144            36       0041          02       02            RG-T-NRSPL                    N
              RG           918            79       ****          02       02            TRAN-CODE                     N
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MSIS030                              MODEL STATE INFORMATION SYSTEM
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                        RECORD INFORMATION                                     NAME INFORMATION
                                  START POSITION          FIELD LENGTH
  FILE ID   CATALOGUE NO      TRANSACTION / FILE      TRANSACTION / FILE        MNEMONIC NAME          HISTORY CODE

    SA          356              01        0001          07        07            SA-PWS-ID                 N
    SA          357              10        0010          04        04            SA-CONTD                  N
    SA          358              00        0014          00        03            SA-SAMPLID                N
    SA          359              00        0017          00        01            SA-SAMPLTP                N
    SA          360              00        0018          00        05            SA-SAMPLDT                N
    SA          361              00        0023          00        04            SA-SAMPLTM                N
    SA          362              17        0027          10        10            SA-SAMPLKY                N
    SA          363              00        0037          00        01            SA-RECDTYP                N
    SA          364              00        0038          01        01            SA-PWS-TYP                N
    SA          365              00        0039          00        09            SA-POP-SRV                N
    SA          366              00        0048          00        01            SA-SOURCE                 N
    SA          367              14        0049          03        03            SA-AN-METH                N
    SA          368              00        0052          00        05            SA-LAB-ID                 N
    SA          369              00        0057          00        01            SA-LAB-OWN                N
    SA          370              00        0058          00        05            SA-D-ANRSL                N
    SA          371              00        0063          00        01            SA-D-ANDEC                N
    SA          372              00        0064          00        05            SA-D-ANDTE                N
    SA          373              00        0069          00        04            SA-S-HIRSL                N
    SA          374              00        0073          00        01            SA-S-HIDEC                N
    SA          375              00        0074          00        04            SA-S-LORSL                N
    SA          376              00        0078          00        01            SA-S-LODEC                N
    SA          377              00        0079          00        04            SA-S-MNRSL                N
    SA          378              00        0083          00        01            SA-S-MNDEC                N
    SA          379              00        0084          00        03            SA-RFD-SPL                N
    SA          380              00        0087          00        03            SA-ACT-SPL                N
    SA          381              00        0090          00        05            SA-PRD-STR                N
    SA          382              00        0095          00        05            SA-PRD-END                N
    SA          383              00        0100          00        05            SA-RGLRSPL                N
    SA          384              00        0105          00        05            SA-SAMPLCT                N
    SA          385              00        0110          00        05            SA-SAMPLDU                N
    SA          386              00        0115          00        03            SA-AIR-TMP                N
    SA          387              00        0118          00        01            SA-CHK-FED                N
    SA          388              00        0119          00        01            SA-CHK-STA                N
    SA          389              00        0120          00        03            SA-CHK-NUM                N
    SA          390              00        0123          00        05            SA-VAR-MCL                N
    SA          391              00        0128          00        01            SA-VAR-DEC                N
    SA          392              00        0129          00        04            SA-FED-VIO                N
    SA          393              00        0133          00        04            SA-STA-VIO                N
    SA          394              00        0137          00        03            SA-VIO-DUR                N
    SA          395              00        0140          00        01            SA-NOTIPUB                N
    SA          396              00        0141          00        01            SA-NOTISTA                N
    SA          397              00        0143          00        01            SA-MCLVIFL                N
    SA          398              00        0144          00        05            SA-MCLVFVL                N
    SA          407              00        0144          00        02            SA-REGION                 N
    SA          408              00        0146          00        02            SA-DISTRIC                N
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MSIS030                                MODEL STATE INFORMATION SYSTEM
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                          RECORD INFORMATION                                    NAME INFORMATION
                                 START POSITION              FIELD LENGTH
      FILE ID    CATALOGUE NO   TRANSACTION / FILE        TRANSACTION / FILE       MNEMONIC NAME          HISTORY CODE

        SA           809           00        0199            00        01          SA-MCLVFDC                 N
        SA           810           00        0200            00        05          SA-MCLVSVL                 N
        SA           811           00        0205            00        01          SA-MCLVSDC                 N
        SA           812           00        0206            00        05          SA-MCLVSSD                 N
        SA           813           00        0211            00        01          SA-FL-FUFC                 N
        SA           814           00        0212            00        01          SA-FL-SUFC                 N
        SA           815           00        0213            00        01          SA-F-BSC                   N
        SA           816           00        0214            00        01          SA-S-BSC                   N
        SA           917           08        ****            02        02          SA-TRAN-CD                 N
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MSI8030                                   MODEL STATE INFORMATION SYSTEM
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                          RECORD INFORMATION                                        NAME INFORMATION
                                 START POSITION              FIELD LENGTH
       FILE ID   CATALOGUE NO   TRANSACTION / FILE      TRANSACTION / FILE          MNEMONIC NAME             HISTORY CODE

         SH          301           00        0001          00        02              SH-FILE-ID                    N
         SH          302           00        0003          00        05              SH-REC-ID                     N
         SH          303           00        0008          00        03              SH-CAT-NO                     N
         SH          304           00        0011          00        05              SH-CUR-UP                     N
         SH          305           00        0016          00        05              SH-LST-UP                     N
         SH          306           00        0021          00        30              SH-OLD-VAL                    N
         SH          307           00        0051          00        30              SH-NEW-VAL                    N
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                                                          '
                               RECORD INFORMATION                                     NAME INFORMATION
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             FILE ID   CATALOGUE NO  TRANSACTION / FILE    TRANSACTION / FILE          MNEMONIC NAME              HISTORY CODE

               VE          455           01      0001         05        05             VE-ID                         Y
               VE          456           16      0006         05        05             VE-ID-REF                     Y
               VE          457           08      0011         07        07             VE-PHS-ID                     Y
               VE          458           15      0018         01        01             VE-TYPE                       Y
               VE          459           21      0019         06        05             VE-EFF-DT                     Y
               VE          460           27      0024         06        05             VE-EXP-DT                     Y
               VE          461           35      0029         01        01             VE-STATUS                     Y
               VE          462           36      0030         04        04             VE-CON-ID                     Y
               VE          463           40      0034         05        05             VE-MOD-MCL                    Y
               VE          464           45      0039         01        01             VE-MOD-DEC                    Y
               VE          465           46      0040         03        03             VE-TREAT                      Y
               VE          466           49      0043         03        03             VE-ALT-TRT                    Y
               VE          467           52      0046         03        03             VE-MOD-FRE                    Y
               VE          468           08      ****         30        30             VE-ABSTRAC                    Y
               VE          469           33      0529         02        02             VE-REASON                     Y
               VE          470           00      0531         00        05             VE-LST-UP                     Y
               VE          471           00      0536         00        02             VE-MISTONE                    Y
               VE          472           16      ****         02        02             VE-REPEAT                     Y
               VE          473           08      ****         06        05             VE-TAR-DT                     Y
               VE          474           16      ****         06        05             VE-ATT-DT                     Y
               VE          475           14      ****         02        02             VE-MIL-COD                    Y
               VE          476           22      ****         01        01             VE-DEL-CD                     Y
               VE          477           16      ****         30        30             VE-MIL-ABB                    Y
               VE          905           06      ****         02        02             VE-TRAN-CD                    N
               VE          909           08      ****         01        01             VE-CRDT-CD                    N
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MSI8030                                        MODEL STATE INFORMATION SYSTEM
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                              RECORD INFORMATION                                          NAME INFORMATION
                                  START POSITION            FIELD LENGTH
         FILE ID   CATALOGUE NO   TRANSACTION / FILE      TRANSACTION / FILE             MNEMONIC NAME            HISTORY CODE

           VI          326           08        0001          07        07                 VI-PWS-ID                     Y
           VI          327           00        0008          00        30                 VI-PWS-NAM                    Y
           VI          328           00        0038          00        01                 VI-PWS-TYP                    Y
           VI          329           00        0039          00        09                 VI-POPULAT                    Y
           VI          330           15        0048          02        02                 VI-REG-LVL                    Y
           VI          331           17        0050          04        04                 VI-CONT-ID                    Y
           VI          332           00        0054          00        01                 VI-SRC-CD                     Y
           VI          333           21        0055          05        05                 VI-LAB-ID                     Y
           VI          334           00        0060          00        30                 VI-LAB-NAM                    Y
           VI          335           26        0090          06        05                 VI-SPLDATE                    Y
           VI          336           32        0095          04        04                 VI-SPLREQD                    Y
           VI          337           36        0099          04        04                 VI-SPLTAKN                    Y
           VI          338           40        0103          03        03                 VI-AN-METH                    Y
           VI          339           43        0106          05        05                 VI-AN-RESL                    Y
           VI          340           48        0111          01        01                 VI-AN-DEC                     Y
           VI          341           49        0112          06        05                 VI-ANDATE                     Y
           VI          342           55        0117          06        05                 VI-SAMPLCT                    Y
           VI          343           08        0122          02        02                 VI-VIOL-TP                    Y
           VI          344           10        0124          06        05                 VI-VIOL-DT                    Y
           VI          345           16        0129          05        05                 VI-MCLVIOL                    Y
           VI          346           21        0134          01        01                 VI-MCLDEC                     Y
           VI          347           22        0135          03        03                 VI-SPLVIOL                    Y
           VI          348           25        0138          04        04                 VI-NUMSPVI                    Y
           VI          349           29        0142          02        02                 VI-VIOLDUR                    Y
           VI          350           31        0144          01        01                 VI-NOTIPUB                    Y
           VI          351           32        0145          01        01                 VI-NOTISTA                    Y
           VI          352           00        0146          00        02                 VI-REGION                     Y
           VI          353           00        0148          00        02                 VI-DISTRIC                    Y
           VI          354           33        0150          01        01                 VI-SPLTYPE                    Y
           VI          355           34        0151          10        10                 VI-SPLKEY                     Y
           VI          800           44        0161          06        05                 VI-DT-RPT                     Y
           VI          801           50        0166          02        02                 VI-LST-RPT                    Y
           VI          802           00        0168          00        01                 VI-LAB-OWN                    Y
           VI          803           01        0169          05        05                 VI-VIOL-ID                    Y
           VI          804           00        0174          00        05                 VI-LSTUPDT                    Y
           VI          805           52        0179          25        25                 VI-REMARKS                    Y
           VI          806           00        0204          00        05                 VI-MCLVSSD                    Y
           VI          915           06        ****          02        02                 VI-TRAN-CD                    N
           VI          916           08        ****          01        01                 VI-CRDT-CD                    N
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